



UNITED SOCIETY OF CHEMISTS AND DRUGGISTS.

COMMITTEE MEETING.

The following report has been forwarded to us for publication:—

"A meeting of the Executive of the Society was held on Thursday, the 5th instant, at their offices, 20, New Ormond-street, W.C., when much important business was brought under consideration.

"Present:—Mr. Henry Matthews, F.C.S., Chairman, and Messrs. Freeman, Padmore, D'Aubney, Baumgarten, Penfold, Bernardini, Tidman, Saph, Wellspring, and Wade.

"The resignation of Mr. Alderman Dakin, the late President of the Society, was formally laid before the Committee, and the Secretary was instructed to express to the worthy Alderman their regret on receiving his resignation, their cordial thanks for his services, and their good wishes for his future health and prosperity. Mr. Miller on tendering his resignation as a member of the Executive Committee, assured his brethren that he was deeply interested in and willing to contribute to the progress of the Society.

"The annual festival of the Society was decided upon, and every gentleman present pledged himself in the capacity of a steward for the dinner to exert himself to secure its success.

"The SECRETARY then gave a narrative of his provincial tour. The stability and prosperity of the Society had been in former years much promoted by such official visits, but the pressure of Parliamentary business this year had necessarily retarded and curtailed them. He found at HULL a delightful spirit of brotherhood prevailing amongst the eighty members of the Society in that town. They expressed their warm commendation of the energetic exertions which had been made to get the Society's Bill through Parliament, and they were well satisfied with the success achieved. Reference was made to their anniversary dinner last year, of which there seemed to be a pleasing reminiscence, especially of the kind support given them by their late borough member Mr. Soames, and by Mr. Lumsden the late, and Mr. Atkinson the present, Mayor of the town. The present cordiality existing in the trade was contrasted with the unneighbourly spirit formerly prevalent among them, and was gratefully attributed to the influence of the United Society. A numerous meeting was held at the Station Hotel, when the present position and future policy of the Society underwent an animated discussion, and a resolution condemnatory of the professed design of the Pharmaceutical Council to claim the examination of all future chemists, and consequent government of the trade, was passed, and the unanimous determination to adhere to the principle of self-government, as set forth in the Chemists and Druggists' Bill, and approved of by the Select Committee of the House of Commons, was the subject of another resolution. Much regret was expressed at SCARBOROUGH that the Society there had taken so little part in the late Parliamentary proceedings, and the members announced their intention of enlisting, if possible, their borough representatives in the interest of the Society. Mr. Williamson was appointed Hon. Secretary upon the resignation of Mr. Eccles. With one or two exceptions all the members of the Society at York paid their membership fees for the present year, and were much pleased with the recommendation of the Select Committee of the House of Commons. Mr. Buott also visited LEEDS. There was no time to hold a public meeting, but he was much gratified on finding a Committee of ten or twelve gentlemen ready to welcome him as the representative of the Executive Committee, with whose labours and success they were satisfied. They also approved of the policy indicated by Mr. Buott for future action—viz., to keep both Government and Parliament up to the standard of the first seven clauses of the Chemists and Druggists' Bill, as adopted by the Select Committee of the House of Commons, and would be ready to render all support in their power to secure the elevation and independence of the trade, as originally contemplated by the Society. The Association at SHEFFIELD, which now embraces about ninety members, is

in many respects a model for other Associations of the Society. They have avoided the mistaken policy of giving the strength of their own organization to the local promotion of what is plausibly described as a *neutral* Chemical Society, and thereby placing themselves in the false position of neutrality to their own institution. When the Sheffield Association was first formed they felt and declared it would be dishonourable to accept the services of the United Society in forming an organization with the ulterior object of turning that organization against the institution which gave it birth. They knew that neutrality in relation to the objects of the United Society would result in practical hostility to it, and therefore instituted social and scientific meetings amongst themselves as originally intended by the Society in forming local Associations. Dr. J. C. Hall, Mr. Dobb, their ex-Chairman, and Dr. Allan their present Chairman, with Mr. Hornby, and several other scientific gentlemen, have given lectures of high class ability and interest, to as many as a hundred chemists with their assistants; their monthly gatherings average about forty members, and their annual dinners were great events. As might be expected of such an Association they unanimously determined to accept nothing less than the Chemists and Druggists' Bill, No. 2, in all its essentiality, and passed a resolution to that effect. They also declared their readiness to give the utmost support to the Executive in case of need. From Sheffield Mr. Buott proceeded to MANCHESTER, which city is the centre of a district containing about 500 members of the Society. The late Chairman and Secretary having resigned, it was highly expedient that other officers should be appointed, and Mr. Alderman Bowker and Mr. A. P. Towle will no doubt realize the high hopes of them which their social position and known ability warrant. Nearly all the membership fees in this great district are paid for this year. A meeting of the members in Manchester took place at the Clarence Hotel, and certainly a more harmonious and business-like meeting could not be conceived. Resolutions similar to those adopted at Leeds, Sheffield, Hull, etc., were unanimously adopted, and the Executive Committee may look to Manchester for that support which might reasonably be expected from its great political and numerical importance. The visit to BOLTON afforded unusual gratification. Nearly every chemist in that town is a member of the United Society, and the majority of them were present at a meeting to consider their present position and future policy. Resolutions of determined opposition to Pharmaceutical government and of encouragement to the Executive Committee to stand firm in their claim to a separate and independent council to superintend the affairs of the trade were enthusiastically passed. It was delightful to observe the spirit of unanimity and good fellowship amongst them, and the veneration with which they regarded their octogenarian chairman, whose cheerfulness, tact, intelligence, and generosity, fully justified the high esteem bestowed upon him. There was a warm heartedness in all they said and did, and the cordial welcome, the unlimited hospitality, and the zeal of the Bolton chemists will long dwell in remembrance as constituting one of the most gratifying episodes of these official visitations. LIVERPOOL was included in the original programme, but it was afterwards found expedient to postpone the contemplated dinner to the 11th instant, when the decisive character of the feelings of the Liverpool Association against Pharmaceutical supremacy will, no doubt, be strongly demonstrated.

"When this narrative was concluded various matters of business importance had the attention of the Committee, who, with an understanding that the future policy of the Society should be defined and promulgated without delay, then separated after a unanimous vote of thanks had been awarded to Mr. Matthews for his important service in the chair.

"By order of the Executive Committee,

"CYRUS BUOTT,

"Registrar and Secretary.

"Offices of the United Society of Chemists and Druggists, 20, New Ormond-street, W.C.
Oct. 9th, 1865."

HULL.

On Wednesday evening, August 23rd, a meeting of the Hull Branch of the United Society of Chemists and Druggists was held at the Royal Station Hotel, Hull, Mr. Toogood

in the chair, for the purpose of meeting Mr. C. Buott, the secretary of the Society, who attended as a deputation from the parent Society, in order to afford to the members of the Hull Branch every information respecting the progress and prospects of Bill No. 2, which is the Bill of the United Society introduced into the House of Commons during the last session. Much interesting and encouraging conversation took place, during which entire satisfaction with the course pursued by the Executive Committee was expressed, and the following resolutions were unanimously carried:—

Moved by Mr. Gates, seconded by Mr. Banks—"That as the Pharmaceutical Council have hitherto opposed the restriction of the sale of dangerous drugs and poisons to examined persons, as provided by the Bill of the United Society of Chemists and Druggists, their claim to examine all future candidates for the trade is utterly inconsistent with their opposition to that Bill, and would not only be unjust to its promoters, but contrary to the recommendation of the Select Committee of the House of Commons; and further, that it is an insult to the entire body of non-pharmaceutical chemists to suppose them either incapable of managing their own affairs, or unworthy to take an interest in the well-being of the trade to which they belong. The chemists and druggists of Hull therefore recommend that the United Society take its stand on the principles of Bill No. 2 only, as recommended by the Select Committee of the House of Commons."

Moved by Mr. Dobson, seconded by Mr. Wokes—"That the incorporation of the trade upon the principle of compulsory examination with equal privileges, and the right of self-government, should be urged upon the new Parliament, and the members of the Association now present pledge themselves to render to the Executive Committee all possible help for the consummation of this desirable object."

MANCHESTER.

A meeting of the members of the United Society in Manchester took place on Friday, the 7th ult., at the Clarence Hotel, to consider their present position and future policy; Mr. Alderman Bowker presiding.

The CHAIRMAN said the question before them was one of such vital importance to the trade, that he had felt it his duty to attend the meeting, even at great personal inconvenience. He thought the bill which had been brought before Parliament by the United Society well calculated to protect the public and elevate the trade; and considering the approbation it had received from the Select Committee of the House of Commons, and the progress it had made, all possible means should be used to bring it to a successful issue.

Mr. BUOTT, the Secretary of the Society, congratulated the meeting upon the success of their efforts so far for an incorporation of the trade. He dwelt strongly upon the right of self-government, and the injustice which would be inflicted upon existing chemists were the claim of the Pharmaceutical Council to the exclusive examination of all future candidates for the trade to be conceded. The present position of the Society consisted in the fact that it had Parliamentary recognition, and that its objects were approved of by a Select Committee of the House of Commons, and recommended by that Committee to the adoption of Government. The policy of the Society was to urge the recommendation of the Select Committee upon Government and the new Parliament.

Mr. J. T. SLUGG moved the following resolution:—"That the opposition raised by the Pharmaceutical Council to the principle of restricting the sale of dangerous drugs and poisons to examined persons, as provided by the Bill of the United Society of Chemists and Druggists—a principle adopted by the Select Committee of the House of Commons—destroys the claim they now set up to be the sole examiners of all future candidates for the trade. That the granting of such a power to the Pharmaceutical Council would not only be contrary to the recommendation of the Select Committee of the House of Commons, but unjust to the respectable body of non-pharmaceuticalists through the kingdom; whilst it is an insult to them to suppose that they are neither capable of managing their own affairs, nor worthy to take an active interest in the wellbeing of the trade. This meeting, therefore, recommends that the United Society take its stand upon the principle of Bill No. 2 only, in accordance with the

recommendation of the Select Committee of the House of Commons." Mr. Slugg said the difficult question, "What a druggist?" was now solved. The Pharmaceutical Council in their Bill, had defined a druggist to be "one who made up prescriptions," whilst the Bill of the United Society defined him to be "one selling dangerous drugs and poisons," a much more comprehensive and practical definition, and the one which had been endorsed by the Select Committee of the House of Commons. The great desideratum now was, that the new Parliament should take up the question at the point where it was left by the old one.

Mr. A. P. TOWLE seconded the resolution. He had hoped to see the two Societies amalgamated; but as the Pharmaceutical Council now claim exclusive examination, and an exclusive examination means practically exclusive government, he thought such an assumption should be strenuously opposed. The resolution was unanimously adopted.

On the motion of Mr. EDMUND HOLT it was resolved "That the principle of compulsory examination of all future chemists, with equal privileges, and the right of self-government for the trade should be urged upon the new Parliament."

Mr. Alderman Bowker having been elected chairman, and Mr. Towle honorary secretary of the Manchester Association the meeting separated.

SHEFFIELD.

The second anniversary meeting of the Sheffield Association of the United Society was held at their rooms in the King's Head Hotel, on Wednesday, the 31st of August. The President, Mr. J. T. DOBB, occupied the chair, and there was a large attendance of members. The balance-sheet having been read over by the Secretary, Mr. E. P. Hornby,

The PRESIDENT in an able and eulogistic speech, congratulated the society upon the success which had attended their efforts during the past year. The association numbered eighty members, and in Sheffield altogether there were only some hundred and twenty in the trade. That was a convincing proof that they had cause for congratulation. He also commented upon the proceedings which had taken place in Parliament, with which, he thought, they had great reason to be satisfied. From the decision to which the Select Committee of the House of Commons had arrived, it appeared as if the basis of the Chemists and Druggists' Bill (No. 2) had been agreed upon for the future guidance of the Government to the utter discomfiture of Bill No. 1, introduced by the Pharmaceutical Society. Under any circumstances they had obtained recognition by the Government and the country, and it would be the fault of the members of the United Society all over the country if that recognition were allowed to die away. He therefore recommended still greater activity in the cause they had in hand, and the result he was sure would be such as to place the members of the trade in a position to which they were justly entitled. The next question entered upon was the advantages derived from the lectures during the past session. Those delivered by H. C. Sorby, Esq., and Dr. Allan (the President elect) were so satisfactory that he hoped the members might have many opportunities of listening to these gentlemen. He expressed earnestly the desire the committee had to extend the benefits of this society to the chemists and druggists' assistants and apprentices throughout the town and neighbourhood, feeling sure that all would in an equal degree be benefited by joining the society. The President then retired, when Dr. Allan, F.R.S., took his place for the coming year.

Dr. ALLAN, on entering upon his presidential duties, assured the members of the association that no trouble or exertions should be wanting on his part to make the coming session eclipse the last. He also stated that the centralizing tendencies of the Pharmaceutical Society should have his strenuous opposition. All institutions should be self-governing, the same as our corporations, unions, friendly societies, and others; and he could see no reason why members should be dragged to London for study and examination when such could be done, with equal advantage to the public, and at a tenth the cost to the individual, by having local boards of examination. This subject opened a field for discussion, and, after some argument, the following resolutions were unanimously agreed to, viz.:—"That as the Pharmaceutical Society have hitherto opposed the restriction of the sale

of dangerous drugs and poisons to examined persons, as provided by the bill of the United Society of Chemists and Druggists, their claim to examine all future candidates for the trade is utterly inconsistent with their opposition to that bill, and would not only be unjust to its promoters, but contrary to the recommendation of the Select Committee in the House of Commons; and, further, that it is an insult to the entire body of non-pharmaceutical chemists to suppose them either incapable to manage their own affairs or unworthy to take an interest in the well-being of the trade to which they belong, and the chemists and druggists of Sheffield will use their best endeavours to promote and carry the principles of Chemists and Druggists' Bill, No. 2, in preference to any other." "That the incorporation of the entire trade upon the principle of compulsory examination, by (local boards of examiners), with equal privileges and right of self-government, should be urged upon the new Parliament, and the members of this association pledge themselves to render to the executive committee all possible help for the consummation of this desirable object."

The PRESIDENT then announced that the session would be opened on the last Wednesday in October, on which occasion he would deliver a lecture. The subject he would state by advertisement, and he hoped to meet with as many friends as on the last occasion. After a vote of thanks to the retiring President, Secretary, and Committee, the business was brought to a close by the announcement that the annual dinner would take place in the second week in October.

LAW.

PATENT MEDICINE LABELS.

At the City Sheriffs' Court before Mr. Gibbons, Mr. Hugh Poole, dispensing chemist, of 43, Fish-street Hill, recently sued a printer for damages sustained through the non-delivery of certain labels for a medicine known as "Usquebyne." Mr. Buchanan for the plaintiff stated that his client had particularly ordered 20,000 labels to be delivered by a certain day, as he was anxious to get his medicine packed up for delivery. Through their non-arrival he had been placed at considerable inconvenience, and had, to a certain extent, lost the sale of some of his goods. His Honour remarked that the plaintiff could not claim damage on this ground as it was too remote. This was a proposition of law which had been fully sustained in the superior courts in a well known case where the plaintiff sent a mill shaft by Pickford and Co., and through the delay in its delivery the owner of the mill was deprived of certain profits, the judges were unanimously of opinion that the damages were far too remote. Mr. Buchanan urged that in the case of patent medicine the vendor of the article depended upon his labels being ready by a certain time, and if an order were given for them to be delivered surely the plaintiff would be entitled to sue in the event of any delay. His Honour was of an entirely different opinion as the law was not at all in a position to measure the profits of a dealer. Mr. Buchanan pointed out that plaintiff had actually suffered a loss of thirty shillings by the non-fulfilment of the contract he made with defendant. He had been compelled to pay another printer £3 10s for the work which defendant agreed to do for £2. The extra cost was for the pressure put upon the second printer as to time. His Honour considered that if plaintiff could give evidence that such was the case then he would be clearly entitled to his verdict, because that was clearly a damage for which plaintiff could sue and recover. Plaintiff was then called, and deposed that he had directed defendant to supply 20,000 labels by a certain day upon which he intended to make up a large parcel of "Usquebyne." Defendant agreed to do the work for £2, and to send in the labels by the time specified, but as he failed to do so plaintiff was compelled to apply to another to do the work in a short time, the consequence being a charge of thirty shillings extra, which sum plaintiff now sought to recover. Defendant stated that he had supplied the labels as expeditiously as possible, and that when they were delivered plaintiff accepted them, and he was only now suing in consequence of a dispute. His Honour, however, held that plaintiff had a good cause of action, and could recover for the extra money paid to the second printer. Verdict for the plaintiff with costs.

GOSSIP.

The firm of Drs. Scowcroft and Elias, surgeons and apothecaries, Southport, Lancaster, has been dissolved by mutual consent.

During the past year two manufactories of glucose or starch sugar have been established in London. The materials from which it is made are chiefly sago and potato starch. The quantity upon which duty was paid in the financial year 1864-5 was 1,064 cwt. The rate of duty charged is 9s. 4d. per cwt. This sugar is intended to be used in brewing.

Messrs. Haworth and Ashworth, manufacturing chemists, Woodhey, Ramsbottom, Lancaster, have dissolved partnership. Mr. Barnes Haworth will continue the business on his own account.

Messrs. Llewellyn and Bolt, surgeons and apothecaries, 71, Blackman-street, Southwark, have dissolved partnership.

Messrs. Kelson and Franks, surgeons and apothecaries, Sevenoaks, Kent, have dissolved partnership. Mr. Kelson will receive and pay all claims.

Mr. Evershed has retired from the firm of Evershed and Niblett, surgeons and apothecaries, Billingham, Sussex. Mr. Niblett will continue the business on his own account, and receive and discharge all claims.

The firm of Pickering and Jones, drug brokers, 10, Lime-street-square, London, has been dissolved by mutual consent.

William Leche, chemist and druggist, Farnworth, Lancaster, has made an assignment of his estate and effects. Trustee, Mr. John Kitchen, seedsman, Worcester.

The firm of Ann Beech and Son, druggists, Atherstone, Warwick, has been dissolved. Mr. Joseph Beech will in future carry on the business.

The partnership subsisting between Messrs. White and Brown, under the style of William White and Company, manufacturing chemists, Lancaster, has been dissolved.

J. Spitzer and D. Lietenstadt, chemical manufacturers, Hatcham-road, Surrey, have assigned their estate and effects for the benefit of their creditors.

The firm of Shepherd and Co., chemists and druggists, 136, Great Portland-street, London, has been dissolved.

John Reeve, wholesale druggist, 91, Snow-hill, Birmingham, has made an assignment of all his estate for the benefit of his creditors. Trustee, Mr. J. Read, 142, Moor-street, Birmingham.

Messrs. Lee and Armitage, manufacturing chemists, Carr-green, Rastrick, Yorkshire, have dissolved partnership. Mr. A. Lee will continue the business on his own account.

The firm of Marsh and Fry, apothecaries, Thaxted, Essex, has been dissolved by mutual consent.

BETTS'S PATENT CAPSULES.

On Thursday, October 5, a public meeting of chemists and druggists, perfumers and patent medicine vendors was held at the House of the Pharmaceutical Society, Bloomsbury-square, to take into consideration the present position of these trades with respect to the sale of capsuled articles. Mr. SQUIRES occupied the chair.

The CHAIRMAN, having read the notice convening the meeting, observed that it was for them to discuss the question, and adopt such resolutions as they might consider necessary with reference to the object they had in view.

Mr. D'AUBNEY moved the first resolution—"That the Patent Laws, as illustrated by recent Chancery suits respecting capsuled articles, are injurious to trade in general, and especially embarrass international and retail trade, and should be amended." He said there could be no doubt that the law as it at present stood, with reference to the use of these capsules, was very injurious to them as retailers of articles fastened by them, because it did not appear there was any necessity that they should be distinguished by the manufacturers by any trade mark, so as to be known one from another. There were between fifteen and twenty capsule manufacturers in England and France who made them precisely similar to Betts's with no distinguishing mark, except in some instances an infinitesimal letter, which was only to be discovered when carefully examined with a glass. He had one of Betts's capsules, which had no distinguishing mark that could be discovered either with or without a glass, and therefore it was that they considered

the present proceedings taken by Mr. Betts against the retailers as most unjust, unfair, and oppressive. If Mr. Betts had given notice by advertisement that after a certain date he should enforce the infringement of his patent, and that he intended to proceed against retailers as well as manufacturers, where capsules were used, it would have been a straightforward and honourable mode of proceeding, and they would all have cheerfully bowed to his decision, and have guarded themselves against such infringements; but to proceed as he had without notice against innocent persons was exceedingly harsh and unjust. The patentee's agents stooped, it appeared, to the meanest practices to entrap the retail dealers. (Hear, hear.) A gentleman informed him (Mr. D'Aubney) on Saturday that a person called at his shop and ordered one of Rimmel's three-and-sixpenny capsuled toilet articles. He told the customer that he had not got it in stock, but he would procure it for him. He did so, and sent it to his customer, and the result was that it got into the patentee's hands, who had since commenced an action against the retailer for an infringement of his patent. (Hear, hear.) It was a most disgraceful proceeding to inquire for an article, and when it was found not to be in stock to allow the retailer to procure it, in order that an action might be commenced against him for what the retailer was perfectly innocent. (Hear, hear.) The proceedings against the retailers had assumed a wholesale character, for within four or five days three or four van loads of articles were purchased for the purpose of commencing legal proceedings against the unfortunate and innocent vendors. It appeared that some man had gone from shop to shop and purchased articles and sent for them the following day, until he had collected enough to fill three or four vans. He had not confined his operations to chemists and druggists, but he had patronised pickle merchants, publicans, perfumers, and others. Although they could not hope for any alteration in the capsule trade, still, so far as the retailer was concerned, they might ask for some protection under the patent laws by which the patented articles might be known, and if not, they had better try and do without patents altogether. Mr. Betts, who claimed a priority of right to make capsules, ought to distinguish his manufacture by some mark, so that the retailer might know whether or not he was infringing the patent.

Mr. HART seconded the resolution. It was both urgent and imperative that some protection should be given to the innocent retailer. If the Patent Laws permitted bills in Chancery to be filed against persons who had unknowingly committed an offence—if it can be called an offence—small in comparison with the heavy bill of costs that would be incurred, they could only be looked upon as unjust and oppressive, and the sooner they were altered the better. He knew nothing of Mr. Betts or his capsules until they were brought to his notice by a bill in Chancery, and had it not been for the Pharmaceutical Society and his friends, he had no doubt he should have settled the matter by paying the costs of the action. It was a monstrous anomaly if the law allowed a bill to be filed in Chancery for the sale of an article covered with a bit of metal on the top of which he knows nothing. It would therefore appear, that when they considered the number of patented articles sold by Pharmaceutical Chemists and others, that they were constantly treading on dangerous ground. They did not want to go into the question of taking away the remuneration of a man's brains by the abolition of the Patent Laws, but they ought not to be in so much danger and to be surrounded by so many difficulties in the sale of certain small articles in a chemist's shop. Some of them might no doubt be victims, and mulcted in large sums, but there would be thousands who would be saved and have to thank them for standing in the front rank. This discussion and agitation of the subject must lead to some beneficial remedy.

Mr. HILLS remarked that he thought the resolution proposed would be all very well if they had been all convicted. He did not think that they were altogether wrong, and therefore he should like to try the point. He was not aware if any of the defendants had compromised Mr. Betts's claim.

Mr. D'AUBNEY said that he had compromised it under the advice of his solicitor.

Mr. HILLS said he should like to have the question tried, whether an innocent man who sold a packet with a capsule of which he had no knowledge was liable to be harassed in the manner Mr. Betts was harassing the retailers of this country. The resolution, it appeared to him, rather affirmed

a foregone conclusion. He was for protecting the man who had a patent, as the law stands; but the man who infringed the patent ought to pay, and not the innocent retailer.

Mr. D'AUBNEY said Mr. Betts had commenced proceedings against both.

Mr. HILLS said the retailers were the innocent parties; not so the manufacturers, who knowingly infringed the patent. He should like to hear Mr. Flux's opinion upon the subject, and whether the question would be tried.

Mr. FLUX (solicitor to the Pharmaceutical Society) said that as Mr. Hills had asked him whether the suits which Mr. Betts had commenced were to be tried, he thought it only right to say that a great many gentlemen had done as Mr. D'Aubney had done. They had taken eminent advice, and acting on it they had compromised their suits, probably by paying handsome sums and costs, thereby affording encouragement to Mr. Betts to pursue his system from one end of the country to the other. He could not with unbounded confidence say that these suits could be successfully defended, but he could say that he defended them with a fair amount of confidence as to the ultimate result. According to the *reductio ad absurdum* of the patent laws, Mr. Betts might have a *prima facie* case in a court of equity, so that he might possibly succeed in getting a decree; but if he did it would be, to the best of his (Mr. Flux's) belief, but a naked decree, without costs, against the defendant, who would perhaps have to pay his own costs, because any damages would be of such a ridiculously small amount. A Vice-Chancellor would probably say that Mr. Betts ought not to have gone to court systematically, as he had done with such a large batch of bills; about 25, all struck off in blank as it were, the only change being the substitution of one gentleman's name for another. So much for Mr. Betts's form of proceeding. But now, looking at the whole matter, he should be able to prove that which perhaps was unknown to other professional gentlemen who had advised on this matter. Mr. Betts had not a patent for capsules, but for metal of which capsules could be made. He should be able to prove conclusively that Mr. Betts had not only sold large quantities of his metal but millions of capsules made of his metal without any distinguishing mark being put upon them; and it was within his own knowledge that Mr. Betts's own agents could not tell, when a capsule was placed in his hands, whether they were made by him or not. Mr. Betts's confidential agent was one day in his (Mr. Flux's) office; and by way of parenthesis he might say that he then believed that they had come to an amicable termination of the matter, and that it would have been a drawn battle and peace would have been established; but it was impossible to say in connection with these matters when they had arrived at a conclusion, and he now believed they would have to fight to the end. On the occasion referred to, they discussed the possibility of distinguishing between a genuine and what was not a genuine article. He (Mr. Flux) had had supplied to him, and with the means of proving it, Betts's plate and his capsules. He placed them in Mr. Campbell's hands, and said to him, "Tell me, are they Mr. Betts's manufacture or not?" Mr. Campbell turned them over and over again, and said, "If I had a microscope perhaps I could tell." (Laughter.) He then said to him, "Then if that be the case, tell me how an outsider can say that these are Betts's capsules or not." (Hear, hear.) To which he replied, "Perhaps they cannot tell." (Laughter.) He repeated his question, "Tell me, without a microscope, are they Betts's manufacture or not?" and he replied, "They are not." (Hear, hear.) Upon which he (Mr. Flux) said, "Then I can prove most distinctly that they are." (Hear, hear, and laughter.) Now, in the course of such a proceeding as that, and in the face of his having sown broadcast over this and foreign countries capsules of his manufacture without the slightest distinguishing mark, it occurred to him (Mr. Flux), that to prove that the capsules proceeded upon were an infringement of the patent would be a very difficult thing for Mr. Betts to do; and at any rate it would be capable for the defendants to show that in selling these capsuled articles they acted in perfect innocence, and that they were in a trap which Mr. Betts himself had laid for all the world—he did not mean to say openly and purposely—but which, nevertheless, was in effect a trap into which the retailers had fallen. In the face of that, and according to the law of justice which he had ever seen administered in

the Court of Chancery, he could not see how the defendants could be cast in costs, and he had a strong conviction that Mr. Betts would have to pay them. So much, then, for the matter that had been referred to him by Mr. Hills's question; and he would say a few words with reference to the proposition before the meeting. Mr. Betts's patent was not, as he had before said, for capsules, but for the metal of which they were made. In the ordinary retail trade he did not think they could take up an article in any one of their shops that might not, for what they knew, expose them to a chancery suit in half a dozen different directions. The capsule on the top of the bottle might expose them to a suit in Chancery, not because of its being a capsule, but because it was made of a given metal. The pot, the label, even the paper, and the colour of the ink might be covered by patents or registered designs, and render them liable to as many Chancery suits; and really if such suits as these could prevail, they could not conduct the ordinary retail trade of the country with any amount of safety. Now, with regard to the international part of the question. Take, for instance, Vichy water. By the law of France, he believed, Vichy water must be capsuled.

Mr. HILLS said it was now covered with tin. They had given up the use of the composition.

Mr. FLUX: By the law of France Vichy water must be capsuled, but if by the law of England it could not be imported with capsules—without capsules it would be contraband leaving France, with capsules it would be contraband touching the shores of England. There were many articles which were imported from France that were never opened until they got into the consumer's hands, which might be full of explosive matter, in the way of Chancery Suits. Now, let them look at the question as it affected the trade in various portions of Great Britain. Betts's Patent did not extend to Scotland. Messrs. Tennant, of Scotland, manufactured bottled beer, which they fastened down with metallic capsules, and sent direct from Scotland to India they did not infringe the patent by the use of the capsules; they, however, received an order, the other day, for some beer to be sent to a foreign port, and as there was no steamer direct from Glasgow to that port, the beer was sent to Liverpool for transshipment to its destination. Now, by its arrival in the port of Liverpool, although it was never intended to be consumed within the realm, it was contraband. A Chancery Suit had been commenced, and no doubt the injunction would be granted, and that being the case, it appeared to him that the resolution was fully supported, that the patent laws interfered with international trade, and materially embarrassed the retail trade.

The CHAIRMAN observed that as Mr. Flux had said that Betts's Patent was for metal only, how was it that metal could not be used in any form. It appeared to him that the metal was to be applied to capsules only.

Mr. FLUX said not at all. The Patent was for the manufacture of metal by a given process,—lead plates coated with tin on both sides—thus combining the malleability of lead with the cleanliness of the tin. Mr. Betts's father had originally a patent for capsules, but it expired long ago. There was now no patent for capsules as capsules in this country. The metal was applicable for capsules, organ pipes, and many other purposes.

The resolution was then carried unanimously.

Mr. HOYDEN, jun., moved the second resolution—"That a petition, embodying the foregoing resolution, and detailing the proceedings referred to, and also praying for the amendment of the Patent Laws, be prepared and presented to Parliament." They had heard the real nature of the case from the statements made by Mr. Flux and Mr. D'Aubney. He had been in communication with several gentlemen upon the subject, and some had said that the suits ought immediately to have been compounded by the payment of certain sums of money to the patentee; but if they had done so the manufacturer would have been liable also, and thus the patentee would have been paid twice as for one infringement. That being the state of the law he considered it high time that some change should be made in it, and he thought the defendants had acted quite right in not compromising the matter. It had been said that the defendants should compromise the matter, and then go to the wholesale manufacturer and call upon him to reimburse the money out of his pocket, but very few of the retailers knew for what article they had been made liable, and to ascertain that, further expense and great loss of time would

result to the retailer in finding out to whom he was to apply to be refunded what he had paid. Supposing, however, the retailer were to find out the manufacturer, and call upon him to repay the £20 or £30 he had paid, the latter would very naturally decline to do so for two reasons, one that if he paid it in one case he would be obliged to do so in innumerable other cases (and, in fact, the demands might be so numerous that he might be compelled to button up his breeches-pocket and take a trip on the Continent for a short time); and the other reason that he denied his liability and disputed that Mr. Betts had any patent. It was quite open for the manufacturer to say that as the retailer had thought proper to compromise the suit on his own responsibility he must abide by the loss.

Mr. PATTEN briefly seconded the motion, which was carried unanimously.

Mr. TWINBERROW suggested that as Lord Stanley had taken an interest in the Patent Laws question, and had been a member of the Royal Commission appointed to inquire into their working, his Lordship should be asked to present the petition to the House of Commons, and support the prayer thereof.

A brief discussion took place upon the suggestion, and it was ultimately arranged that the presenting the petition to Parliament should be left to the Committee to decide.

A vote of thanks to the Chairman was unanimously agreed to, and the proceedings terminated.

GAZETTE.

BANKRUPTS.

BEESON, JOSEPH, Birmingham, druggist.

CATTELL, GEORGE D., late of Howard-street, Middlesex, cosmetic manufacturer.

FIELD, W., and HARE, R. F., Apple-yard, Seward-street, Goswell-street, manufacturing chemists.

SPIER, EDWARD PEARCE, Cheltenham, chemist.

WILDSMITH, JAMES HENRY STAPLES, Church-bridge, near Cannock, chemical manufacturer.

PARTNERSHIPS DISSOLVED.

BARNES and ASHWORTH, Woodhey, Lancashire, manufacturing chemists.

PICKERING and JONES, Lime-street-square, drug brokers.

THE SOUTH YORKSHIRE GLASS BOTTLE COMPANY, Wath-upon-Deane, Yorkshire, and Russell-street, Bermondsey; as far as regards J. Turner and B. Rylands.

CONTAGIOUS DISEASES AND THEIR MODE OF PROPAGATION.

THE following extract from an address delivered by Dr. Lankester at the Social Science Congress on Monday last cannot fail to interest our readers:—

"Among our sanitary reformers there are two great schools, one of which maintains that the great mass of zymotic diseases are produced by special poisons, and are called contagionists, while another school do not believe in the existence of special poisons, but believe that certain general conditions of sanitary neglect and dirt are alone necessary to produce the group of zymotic diseases, and they are called anti-contagionists. Now, I believe that the extreme views of either school are wrong, and I have a very deep impression that for sanitary measures to be directed by one or other party in the present state of our knowledge of the diseases would be to plunge us into worse evils than quiet submission to their unresisted influence. For an officer of health to suppose that cleansing, and draining, and washing, would arrest the progress of smallpox in a house full of unvaccinated persons would be an utter absurdity; while the placing a cordon around an ill-ventilated and badly warmed house, expecting to keep off bronchitis and pneumonia, while the temperature is 12 degrees below freezing point, would be equally absurd. But while all are agreed that smallpox is a contagious disease and bronchitis is not, there is a large class of diseases on which sanitary authorities differ as to their nature, and the best modes of arresting their development. It is on this account that I now propose briefly to examine what is really known of the nature of contagious diseases and their mode of propagation; and if I succeed in nothing further, I hope I shall be able to show that it is of the utmost importance in all our sanitary operations that we should, at least, consider the issues of both theories; that while believing in contagion, we should act as if all depended on the removal of the general external agencies of disease; or while

believing in the spontaneous origin of diseases in dirt, we should yet do all to avert the possibility of their propagation by contagion. It is of the highest importance, at the same time, that we should pursue the inquiry into the origin and nature of those zymotic or pneumatic diseases which carry off annually upwards of 100,000 of our population. In order to do this I think there are three circumstances that demand our attention. There is, first, the poison that is supposed to kindle the disease; and, secondly, there is this medium that conveys it to, thirdly, the person predisposed to take the disease. If we lose sight of any one of these elements in investigating zymotic diseases, we shall most assuredly get wrong, and practically commit great mistakes. Thus, let me take smallpox as an example. In order to propagate this disease there must be, first, the poison matter from a smallpox pustule; and, secondly, a medium of conveyance, either the point of a lancet or an atmosphere to convey the poisonous germs; and, thirdly, there must be a person predisposed to take it. If the poison is not there, no amount of predisposition, that we are aware of, will engender the disease. Again, if the poison is there, and the predisposed person, there must be a medium of conveyance; and if a predisposed person is at one end of a room and the affected individual at the other, and the current of the atmosphere blows from the unaffected to the affected person, no poison will pass and no disease be established. Or again, the atmosphere may be so extensive as to dilute the poison to a tenuity by which it becomes powerless; or the atmosphere may be artificially ozonized, or iodized, or chlorinized so as to destroy the germs of the poison. But let the poison be ever so intense, and the medium ever so ready to convey it, if the unaffected person has had the smallpox or been vaccinated, no disease will be produced. Hence, we must study the poison-makers, the poison-bearers, and the poison-takers. Now, with regard to poisons, even the anti-contagionists admit that in what they call miasmatic diseases conglomerations of dirt and filth, or matters in their wrong places, do get into the system, and, at one time or another, do upset and damage the healthy working of the machinery; and they are also bound to state in a scientific way what compounds are produced by dirt, and in precisely what way they affect the system. There can be no doubt that certain inorganic agencies, such as carbonic acid, sulphuretted, phosphuretted, and carbonetted hydrogens, ammonia, and sulpho-cyanogen, do produce injurious effects upon the system. Continued exposure to such exhalations may prevent a proper oxidation of the tissues, and render it predisposed to take in the diseases of special poisons, but we have no evidence to show that any of these agents—although they will destroy life—are capable of producing alone any of the forms of miasmatic disease. Again, it seems demonstrated that there arise, during the decomposition of vegetable and animal matters, certain organic molecules which, being taken into the system, would produce certain definite changes in the system constituting well-known forms of disease. Thus, ague and kindred fevers, called paludal, and paroxysmal fevers, do not seem to be produced by poisons formed in the animal system, but by poisons formed during the decomposition of vegetable matter. A certain amount, also, of the diarrhoea of summer is to be set down to the decomposition of animal and vegetable matters. Certain quantities of these matters are directly taken into the stomach and bowels, while others appear to come in contact with the mucous surface by inhalation. There is, also, one of the endemic and epidemic fevers of our country that is supposed by high sanitary and medical authorities to originate in the spontaneous decomposition of organic matters in drains and sewers; hence, it has been called 'drain-fever.' It is, however, generally better known by the name of gastric or typhoid fever. That this disease is generated by a specific poison has been demonstrated by Dr. William Budd, of Bristol, and should it be capable of demonstration that this disease is really generated *de novo* by the matter of drains and sewers, it would be an interesting fact, as showing the possibility of a contagious disease being produced afresh. But up to the present time we have no conclusive experiment with regard to the origin of any of the specific contagious diseases. There is no error, perhaps, of more vital importance to the public health than that which was fallen into by some of our early sanitary reformers—a belief in the spontaneous origin of the several forms of diseases produced by specific contagions. The most common forms of contagious

diseases in this country are smallpox, scarlet fever, measles, whooping-cough, typhus fever, typhoid fever, and our occasional visitant—Asiatic cholera. Of the intricate nature of the poisons producing these diseases we know but little, but recent researches with the microscope lead us to hope that we are not far distant from the time when at least the form of the poisons of these diseases will be made visible to the human eye. It is a fact known to all that the blood contains two sorts of cells or globules, the one red, the other white. The white cells are composed of matter in a state of vital change. It is these cells which accumulate in inflamed parts and which form the pus found in vesicles, pustules, abscesses, and inflamed surfaces of the body. These pus cells have a great power of multiplication, and they retain their vitality after they have been removed from the living body. We can convey common pus cells from one living body to another and make them increase. There is a disease of the eye attended with a large formation of these pus cells, and these may be conveyed through the air from one person's eye to that of another and produce the same disease. In the disease known as pyæmia these cells assume a specific character; and Dr. Richardson informs me that he has succeeded in producing, artificially, pyæmia in animals by introducing the secretions of an animal affected with pyæmia into one that is not. In smallpox we have a disease characterized by pustules over the body. Each pustule contains a secretion abounding with pus cells, and the matter with which they are formed. It is the introduction of this purulent matter into the blood that sets up the dreadful malady of smallpox. In the same way we find the vesicle of cowpox charged with white cells, and the 'germinal matter' of Dr. Beale. The germinal matter here, however, does not possess the vitality and energy of that of the smallpox pustule. It is seldom conveyed through the air; like some other animal poisons with which we are acquainted, it requires contact; but in being introduced into the blood of another person, it produces the same disease—always the same disease, never another. We may learn much of the nature of these poison-cells by the study of those we know so well. These cells, or germinal elements, retain their vitality long after they have been removed from the body, if you exclude them from the air. The vaccine lymph has been conveyed between pieces of glass, or dried on tips of bone or threads of line and cotton, all over the globe, and has been found capable of engendering the disease cowpox. This shows us how all these poisons may be covered over in linen, cotton, and woollen fabrics, how they can be conveyed in letters and newspapers, how they may adhere to inanimate substances of all kinds, and only need the awakening influence of a little moisture to summon them to awake and live anew. No one, that I am aware, has yet isolated the poison of scarlet fever, of measles, of typhus, of cholera, and of the other diseases of the group of contagious diseases; but, reasoning from analogy, and there could hardly be a better instance of the process, we are driven to the conclusion that these diseases depend on a cause similar to that of smallpox, and that the real form of the poison is the charged white cell of the blood. It is, however, interesting to notice some varieties in the habits of these poisons. Thus we are not aware that the poisons of smallpox, measles, scarlet fever, or typhus are conveyed by any means but through air, while there is every reason to believe that the poisons of typhoid fever and cholera are conveyed by the agency of water. There is an interesting relation between this fact and the seat of the disease, for, while one set of diseases manifest themselves by eruptions upon the skin, the other set is characterized by derangements of the mucous membrane of the intestines. A question of high interest arises here, and it is one that has not at present been settled, and that is, as to whether the poison matter of these diseases is capable of multiplying itself by cell-division, or the ordinary forms of the growth of fluvial matter out of the body. It does not seem impossible that this should be the case, although at present we have no demonstration of the fact. We know that such multiplication takes place among the lower forms of plants, as the yeast, or ferment fungus (*Saccharomyces Cerevisiæ*), and that it also occurs among the vibrioids and monadine in the animal kingdom. Another interesting question, connected with these poisons, is the possibility of transformation or development. In the animal kingdom we have this phenomenon taking place, that an animal passing from its egg state to its adult stage is capable at each stage of

multiplying itself, so that a number of creatures are produced at each stage of its growth, capable of attaining, under proper external circumstances, the adult stage. Now it may be that among these cell-poisons there are stages of development at each of which the cell is capable of propagating its own form and no other, till it meets with the proper external circumstances for a further change or development. Professor Huxley relates that on board the Rattlesnake, after they had been six weeks at sea, the cook got an attack of erysipelas; this spread through the ship and ceased. After this one of the sailors had numps, and this also spread through the ship. There are other interesting facts bearing on this point, but I throw out these hints here as subjects full of practical importance to the sanitarian. Let me now say a few words with regard to the means of conveyance of poisons. The most obvious of these means are the atmosphere and water. The air to carry most poisons must be warm and moist. The poison of yellow fever spreads in hot climates; the poison of typhus is arrested by heat on the one side and cold on the other. It prevails, in fact, only in climates having a range of temperature between 40° and 62 Fahrenheit. At the temperature of boiling water all these poisons are destroyed—a most important fact, as we have in every household in Europe the means of destroying them. But there are other means of conveyance besides air and water. Articles of food, articles of wearing apparel, bed clothes, curtains, carpets, and all vessels and depositories containing the secretions of human beings, may retain the poison cells in all their integrity. These things may carry the poisons from household to household, disseminate them in our streets, our omnibuses, our railways, steamships, and public conveyances of all kinds. The drain may carry them into the sewer, and the sewer into the river, but in their course they may escape from our ventilating shafts, our gully holes, and open closets. They may be emptied into our wells and rivers, and conveyed to our bodies by means of spring water or river water. They may be shut up in drawers or in old closets (of which there are many striking instances on record), and, at any moment when brought in contact with the human system, they may start into life and activity again, to renew their ravages on systems predisposed to their action. That the poison of a disease may exist, and every possible access to a system be present, and yet the disease be not taken, is well known. Instances frequently happen of persons living to old age, without having had any of the ordinary contagious diseases of mankind. It would be well to make a more accurate study of these cases. But we know something of the laws of predisposition to disease. We know, for instance, that persons who have had smallpox are not disposed to take it again. We know that in nine cases out of ten if persons have been vaccinated they will not take smallpox. This is one of the great triumphs of our modern civilization. It is the beacon of our hopes with regard to erushing out for ever the poisons that can only be propagated in human systems. But our knowledge of predisposition extends further than this. We know that where the four great factors of our life have been scantily supplied, or vitiated, there predisposition, not only to idiopathic and self-generated disease exists, but to receive the germs of the poison fevers, of which I have been speaking. So well is this known, that we can point out certain external conditions which will so act upon the human system as to predispose it to certain forms of disease. Thus, among our working men and women who live in badly ventilated and overcrowded houses we find those who are most ready to take the poison of typhus. Among the underfed, the fever called relapsing, and which differs from typhus and typhoid, finds its most ready victims. Hence it has been called famine-fever. But no class or condition of men have been discovered who are not susceptible of these poisons. The medical man, who lives free from the influence of over-crowding or famine in his own home, is frequently stricken down with these fevers. The anxiety of the student, the statesman, or the prince may undermine his health, and render him a ready victim for the poison that lies concealed like a snake in the grass in his path. It is not necessarily among the over-crowded and badly-ventilated rooms of the poor, and the squalor and filth of our lowest classes, that scarlet fever selects its victims and commits the greatest ravages. The homes of the rich and the hearths of the comfortable middle classes of England are made desolate by this all-pervading scourge, and it is a

mockery to say that we know the conditions of those who will be the subjects or the victims either of scarlet-fever, or its twin sister of mischief, diphtheria. That both these diseases depend on a special poison, which can be communicated through the medium of the air, and preserved in activity or inanimate substances, as clothes and excreta, I have no doubt; but we cannot predict with any certainty who will be their victims."

PHARAOH'S SERPENTS.

At the Supper of the Birmingham Conference Mr. Reynolds caused much amusement and surprise by producing some of these chemical opifidians. Since then the true nature of the *serpents de Pharaon* has been explained in the pages of the *Pharmaceutical Journal* by Mr. C. H. Wood, F.C.S., whose interesting communications we now reprint:—"A very curious toy is now being sold in Paris under the name of Pharaoh's Serpent. As this toy really constitutes an interesting chemical experiment, perhaps an account of it may prove interesting to your readers. It consists of a little cone of tinfoil containing a white powder, about an inch in height and resembling a pastille. This cone is to be lighted at its apex, when there immediately begins issuing from it a thick serpent-like coil, which continues twisting and increasing in length to an almost incredible extent. The quantity of matter thus produced is truly marvellous, especially as the coil which so exudes is solid, and may be handled, although, of course, it is extremely light and somewhat fragile. Having a little of the white powder with which the cones are filled placed at my disposal by a friend, I submitted it to analysis, and found it to consist of sulphocyanide of mercury. This salt when heated to a temperature below redness undergoes decomposition, swelling or growing in size in a most remarkable manner, and producing a mixture of *mellon* (a compound of carbon and nitrogen) with a little sulphide of mercury. The resulting mass often assumes a most fantastic shape, and is sufficiently coherent to retain its form. It presents a yellow colour on the exterior, but is black within. The 'serpent' shape, of course, results from the salt being burnt in a cone of tinfoil. Both the mercurous and mercuric sulphocyanides decompose in the same manner; but the mercuric salt, containing more sulphocyanogen, seems capable of furnishing a larger quantity of *mellon*, and is the one used in the French serpents. A solution of pernitrate of mercury is readily precipitated by sulphocyanide of ammonium and the mercuric sulphocyanide may be easily so prepared. It is best to use the mercurial solution as strong as possible, and to keep it in excess throughout the precipitation. Solution of perchloride of mercury is not so easily precipitated as the pernitrate, probably owing to the solubility of the mercuric sulphocyanide in the chlorides. Perhaps I may be excused for adding that sulphocyanide of ammonium, suitable for the above purpose, may be very easily and economically prepared as follows:—One volume of bisulphide of carbon, four volumes of liq. ammon. fort., and four volumes of methylated spirit are put into a large bottle, and the mixture frequently shaken. In the course of one or two hours the sulphide of carbon will have entirely dissolved in the ammoniacal liquid, forming a deep red solution. When this result is attained, the liquid is boiled until the red colour disappears and is replaced by light yellow. The solution is then evaporated at a very gentle heat (about 80 or 90 degrees F.) until it crystallizes, or just to dryness. The product is sulphocyanide of ammonium, sufficiently pure for the above purpose. One recrystallization from alcohol will render it quite white. One ounce of bisulphide of carbon yields, by this process, exactly one ounce of sulphocyanide of ammonium."

AN ALARMING ADVERTISEMENT.—A few days since the people of Newbern were terribly alarmed by huge posters placed in conspicuous places all over the city with these mysterious characters "R. C. B." Here was a plot, and after many councils among military officers, and the issue of innumerable orders, it was decided that they could mean nothing less than "Rise, coloured brethren!" and guards were sent round the city to tear them down. When nearly all were destroyed, a quack medicine vendor, of whose name the posters bore the initials, appeared and protested against the outrage. The military were destroying his advertisements.—*Philadelphia Correspondent of the "Times."*



LONDON, OCTOBER 14, 1865.

CORRESPONDENCE.—All communications should be addressed to the Editor, at 24, BOW-LANE, E.C.; those intended for publication should be accompanied by the real names and addresses of the writers.

QUERIES.—The Editor cannot undertake to attend to those which are anonymous, or to send answers through the post.

SUBSCRIPTION.—The subscription to the CHEMIST AND DRUGGIST is 5s. per annum, payable in advance. Should a receipt be required, a stamped envelope must be sent with the amount of subscription. A specimen number may be had upon application, price 6d.

POST OFFICE ORDERS.—Post-Office Orders to be made payable at the General Post Office to the Publisher, JAMES FIKTIL, who is alone authorized to receive accounts.

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THE CHEMIST AND DRUGGIST is published on the Fifteenth of every month, and regularly supplied direct to the Members of the Trade in Great Britain, Ireland, the Colonies, and all the principal seats of foreign commerce.

Everything intended for insertion in the current Month must be sent in before the 10th, except Employers' and Assistants' Advertisements, which will be received until 9 a.m. on the morning previous to publication.

“THE CHEMIST AND DRUGGIST” AND THE UNITED SOCIETY.

Our correspondent “PHILAETHES” takes us to task for having neglected the interests of the United Society, and tells us pretty plainly that we must mend our ways if we wish to enjoy the continued support of the trade. His letter is seasoned with compliments, but we cannot accept it as a friendly communication. The pill is unpleasantly bitter in spite of its silver coating. Had “PHILAETHES” been moved simply by a desire to do us good, he would have administered his corrective medicine privately. He has often written to us in his own name, and has always found us willing to receive suggestions. However, as he now wishes to lecture us publicly in his literary domino, we cheerfully provide him with a rostrum.

The dearth of news and correspondence relating to the United Society in recent numbers of our journal must not be ascribed to our “lukewarmness” or to “the development of a strong ‘Pharmaceutical’ predilection,” but simply to the temporary inaction of the Society. As nothing was doing we had nothing to write about. This period of repose is referred to by our esteemed correspondent Mr. WADE as a natural sequel to a period of great activity. The Society is now wide awake again, and several reports—the first which have reached us since June—appear in our columns.

We admit that we have repeatedly “disclaimed all connection with the United Society.” We strive to represent the entire body of chemists and druggists, and we do not like to be set down as the special organ of any Society. We always have pursued an independent course, and we hope to get along in future without leading strings. Our voice may be feeble, but it is not an echo. As an independent journal we have watched over the United Society, and helped to raise it to its present position. Had we been the avowed organ of that Society, our editorial articles could not have had much weight with the trade.

The “strong ‘Pharmaceutical’ predilection” which “PHILAETHES” has detected in our editorial articles will

always be apparent when we honestly believe that the Pharmaceutical Society is working for the good of the whole trade, but never when we see it pursuing a selfish course. We confess that we should like to see a “Bill for regulating the qualifications of chemists and druggists,” which would have the support of both Societies, as we are convinced that the pressure of the whole trade will be required to obtain a comprehensive and liberal measure from the Legislature. If a wish for united action be offensive to “PHILAETHES,” we must conclude that his opinions are at variance with those held by the founders of his Society.

A few extracts from the leading articles which have appeared in our columns during the present year will convince our readers that we have not turned our coat. In January we wrote: “Our subscribers know very well that we do not represent the interests of a single society, but those of the great body of the trade. . . . We cannot afford to take one-sided views of trade questions, for we are supported by all classes of chemists and druggists.” In February we concluded an article with the following counsel: “Let pharmacæutists and non-pharmacæutists meet together, as they met at York, and we shall soon cease to hear of the differences between the two sections of our trade.” In April, after seeing the Bill of the United Society, we wrote: “It is a broad and liberal measure, and we have no doubt that many of its provisions will be included in the Bill of the Select Committee. The restrictions it places on the sale of drugs and poisons give it much greater importance as a measure for protecting the public than the Pharmaceutical Bill, which only places restrictions on the dispensing of prescriptions. The difficulty of the United Society is the formation of the new governing body. We cannot help thinking that the Select Committee will reject the new machinery required to put the Act in operation, and will decide that the Pharmaceutical body shall be entrusted with the registration and examination of chemists and druggists provided the latter are fully represented in the Council. We have no wish to see two examining and registering bodies, if the one already in existence will consent to work for the good of the whole trade. There would be no difficulty in legislating for chemists and druggists if the members of the Pharmaceutical Society were willing to make a few sacrifices.” In July, after reviewing the Report on the Chemists and Druggists’ Bill, we wrote: “We hope and trust that before any further steps are taken in the path of legislation, that members and non-members of the Pharmaceutical Society may cease to pull in opposite directions. As long as the two sections of the trade are at loggerheads, it is useless to expect anything in the shape of a good and comprehensive scheme of legislation. If the pharmacæutists keep aloof from the rest of the trade, their Society will gradually sink into insignificance. If the members of the United Society and the druggists of no society refuse to meet the pharmacæutists in a proper spirit, it is not unlikely that they will fall into the clutches of the doctors.”

There is one charge brought against us by “PHILAETHES” which we cannot refute. We never fulfilled our promise to review the correspondence between Messrs. PROCTOR, WADE, and D’AUBNEY. After the promise was made, two letters appeared, which brought the controversy to a satisfactory conclusion. Though we did not review this lengthy correspondence, we devoted an article to Mr. PROCTOR’s opinions in our number for last March.

“PHILAETHES” says that “a medium” is wanted, “through which the members of the trade can be informed of all that is transpiring which affects their interest.” We say that we offer them such a medium. During the last few months, while the United Society has been sleeping, we have afforded the members of the trade much information upon matters affecting their interests. We have given them long extracts from the minutes of evidence taken before the Select Committee on the Chemists and Druggists’ Bills. We were the first to caution them against the use of metallic capsules. We have furnished them with reports of trials and inquests of vital importance to them. We have given them a full account of the Pharmaceutical Conference, an association which labours to promote the scientific and social advancement of all chemists and druggists. If any matters affecting the interest of the trade have come under the notice of “PHILAETHES,” and have not been touched upon in these pages, who is to blame?

AMERICAN PHARMACEUTICAL ASSOCIATION.

The thirteenth annual meeting of the American Pharmaceutical Association was held in Boston, September 5th, 6th, 7th, and 8th, 1865. The meeting was characterized by a large attendance, interesting reports, valuable essays, and sociability which marked all its proceedings. About 100 members were present at each of the sittings.

The Association was called to order at 3 o'clock p.m., September 5th, by the President, W. J. M. Gordon, of Cincinnati, Ohio, who appointed a Committee of three to examine the credentials of delegates appointed. The Committee subsequently reported the delegates present, representing the Colleges of Pharmacy of Boston, New York, Philadelphia, Maryland, Cincinnati, Chicago, and St. Louis, also a delegation appointed by the Alumni Association of the Philadelphia College of Pharmacy. Upon the admission of the latter, there was considerable discussion, but they were admitted. A nominating committee was then appointed, after which the President read his annual address. After the reading of the address, the amendment to the constitution proposed at the meeting last year, to elect a permanent secretary with a salary in lieu of the recording secretary, was taken up and unanimously adopted. The association then adjourned to the following morning at 9 o'clock.

September 6th.—After calling the meeting to order the report of the Treasurer was read, accepted, and referred to an auditing committee.

The Committee on nominations reported, as follows:—
President—Henry W. Lincoln, of Boston, Mass.

First Vice-President—George C. Close, of Brooklyn, N.Y.

Second Vice-President—E. W. Sackrider, of Cleveland, O.

Third Vice-President—C. A. Heinich, of Lancaster, Pa.

Treasurer—C. A. Tufts, of Dover, N.H.

Permanent Secretary—J. M. Maisch, of Philadelphia, Pa.

Corresponding Secretary—P. W. Bedford, of New York.

Chairman of Executive Committee—T. S. Wiegand, Philadelphia, Pa.

Chairman of Committee on Progress of Pharmacy—Euno Sander, of St. Louis, Mo.

Chairman of Committee on Drug Market—S. M. Colecord, of Boston, Mass.

Chairman of Committee on Scientific Queries—W. Procter, jun., Philadelphia, Pa.

Chairman of Business Committee—Dr. E. R. Squibb, Brooklyn, N.Y.

They were all unanimously elected.

The reports of the Committee on Progress of Pharmacy, Corresponding Secretary, and the Committee on Queries were presented and acted upon. The Committee on the Drug Market were excused from reporting at this session. The reading of papers accepted last year being then in order, replies from E. C. Jones on *Cincifuga Racemosa*, A. B. Taylor on the Use of Glycerine in Preparations to Prevent the Deposition of Apotheme, W. J. M. Gordon on the substitution of Glycerine for Alcohol in Extracting Drugs or Pharmaceutical Preparations, Professor William Procter on Liquidamber *Styraciflua*, W. S. Thompson on Dispensing of Ointments, G. F. H. Markoe on the Camphor Waters of the United States and British Pharmacopœias were read, accepted, and referred to the Executive Committee for publication. At the afternoon meeting the Replies to queries being resumed, Professor J. M. Maisch, read a paper on the Poisonous Properties of *Rhus Toxicodendron*, A. E. Albert, a volunteer paper on the Sophistication of the Rectified Oil of Amber, and P. W. Bedford on a Simple Apparatus to Maintain a Regular Heat between 120° and 160° F., volunteer papers by George C. Close on an Adversed Remedy for Epilepsy, Dr. E. R. Squibb on the Quantity of Alcohol Necessary to be Used in the Preparation of Fluid Extracts.

The early portion of the evening session was devoted to informal remarks on various Pharmaceutical topics. A volunteer paper by J. M. Mill, entitled "Fidelity to the Pharmacopœia," was read.

September 7th.—A morning sitting was held on this day. The early portion was occupied in discussing various amendments to the constitution. F. Steenus presented a volunteer paper on the Production of Peppermint in Michigan, as also on Native Wine, made from the Garden Rhubarb, which were referred to the Executive Committee. T. S. Wiegand

read a paper on the Obligations of Pharmaceutists in respect to the Instruction of those in their Employ; and N. G. Bartlett presented a paper on an Automatic Vacuum Apparatus.

The next place of meeting was then discussed, when it was decided that it should be held in Detroit, Mich., on the fourth Wednesday of August, at three o'clock p.m.

September 8th.—An Essay on Gas Heating Apparatus adapted to the various Purposes of the Apothecary was replied to by P. W. Bedford, who exhibited specimens of the various apparatus used, with statements of their respective economy and use.

Dr. W. H. Pile also read a paper on Volumetric and other Apparatus designed for the use of the Apothecary. E. Parrish read a Paper on Taxation and Licensing the Sale of Spirits in England.

This led to a lengthy discussion on the Effects of the Internal Revenue Law, on the Business of the Apothecary. A resolution was finally adopted, that the whole subject be referred to a Committee of five, who shall take into consideration the whole subject relative to this law in its bearings on the objects of the Association, with special reference to the alcohol question and report at the next annual meeting. The minutes of the meetings being then read by the Secretary on motion the meeting of the Association adjourned.

BARÈGES AND ITS WATERS.*

BARÈGES is a French village consisting of about sixty houses, which are abandoned by their owners during the winter months. The furniture, bed linen, and other movables are carried away, the windows and chimneys carefully closed, and the houses left in charge of a few "gardiens," who pass a great part of their time in the bath-houses, enjoying the elevated temperature produced by the warm springs. The houses in winter are often buried in snow as high as the first floor windows.

Barèges is situated in a gorge about three and a-half leagues long, running from W.S.W. to E.N.E. (that is, following the direction of the great chain of the Pyrenees), in lat. 42° 51' N., and long. 2° 17' E., at an elevation of 1,292 mètres (4,240 feet). It is the highest of all the watering-places in the Pyrenees. The soil on which it is built is partly alluvial and partly formed by the *débris* of the rocks around. These consist of perpendicular layers of schist, alternating with layers of ferruginous anthracite, the whole superposed on a base of magnesian limestone. At the present time there are eight available mineral springs, which vary in temperature and in other properties. They are thus named:—

	Temperature.
Source de la Chapelle . . .	88° Fahr.
" des Bains Neufs . . .	99° "
" de l'Entrée . . .	102° "
" du Fond . . .	95° "
" du Tambour . . .	111° "
" Polard . . .	99° "
" Dacien . . .	93° "
" de la Piscine Militaire . .	106° "

The Source de Jehan and other springs that were once famous have been covered up by the unstable soil.

The "Etablissement des Bains" consists of a large stone gallery, with bath-room opening into it on either side. The baths are sixteen in number, varying in temperature and properties according to the spring which feeds each particular bath. The temperature of the prepared bath is from 1° to 2° lower than that of its spring. There are also three rooms for administering the douche, a "buvette" for drinking the water, and a small cabinet for the use of those who employ the water as a gargle. Outside the gallery are three "piscines," tanks capable of holding each twelve or fourteen persons. These are the hottest and strongest of all the baths. The bathing season extends from the beginning of June to the middle, or even end of September.

The water is clear, transparent, and limpid, sp. gr. 1.00039. It has a slightly disagreeable taste, and a smell resembling that of hard-boiled eggs. It leaves a soapy sensation on the skin. When exposed to the air it decomposes as soon as

* This interesting article, communicated by M. E. R. West, of Dawlish, is from the pen of an invalid gentleman who has derived great benefit from the Barèges waters.

cold, giving out a horrible stench. It contains in solution a large proportion of sulphide of sodium, with small proportions of chloride of sodium, sulphate and carbonate of soda, and other salts; and it holds in suspension a fat, soapy substance called "barégine," or "glairine." It is generally supposed that the efficacy of the water as a curative agent depends on the presence of this substance; but whether it does or not, barégine deserves special notice on account of its curious nature.

Barégine in the moist state is a mucous-like substance, almost colourless, and destitute of taste and odour. It is very slightly soluble in water, even at 212°, and is quite insoluble in ether. It does not become gelatinous when cold, and is not coagulable by heat. When dry it forms an elastic, semi-transparent, horny mass. When this mass is strongly heated it turns black without liquefying, and gives out a thick smoke and a strong empyreumatic odour, resembling that of burning horn.

According to Bouis this strange substance contains from 44 to 48·7 per cent. of carbon, 6·7 to 7·7 hydrogen, 5·6 to 8·1 nitrogen, and 30·2 to 40·7 per cent. of ash chiefly consisting of silica. It does not contain sulphur. Its chemical composition proves it to be an organic product, and Danberg affirms that it consists for the most part of conserve and oscillatoriz. Barégine is also found in the springs of Plombières and in other sulphurous thermal springs.

The waters at Barèges are essentially stimulating, and at first they invariably induce a febrile movement. Persons who are strong and in good health, particularly, should be cautious in the use of them. Many such have become seriously indisposed after taking only a few baths. In the case of persons who are suffering from chronic complaints their virtue consists in converting the chronic into the acute form of the disease; and it may be considered certain that a cure will not take place, even although temporary relief may be experienced unless the symptoms become first aggravated. Patients of a sanguineous temperament, those subject to congestion of the brain, those who have a tendency towards disease of the heart and lungs, and finally those of an irritable and excitable disposition should use the waters, and especially the douche, with very great caution, as the severe aggravation of their maladies after a few baths may reasonably be dreaded. It is stated that some such patients have been carried off by apoplexy.

These waters are invaluable for the cure of scrofula and other skin diseases, of old ulcers, of rheumatism, when not of a gouty origin, of syphilis, and of some kinds of paralysis. They promote the exfoliation of carious pieces of bone, and appear to force out of the body all foreign substances, even such bulky things as musket-balls. Their action in many instances is miraculous, and it is a pity they should be so little known in England.

ON IPECACUANHA WINE.*

BY MR. GEORGE JOHNSON.

WHAT is the nature of the deposit in ipecacuanha wine, and how is it affected by the nature of the wine used? The investigation of this subject is one of great practical interest to pharmacutists, for it has regard to a preparation which, while it is one of the most useful, and most used in the Pharmacopœia, is at the same time, in its present form, one of the least satisfactory of the galenical class of remedies. Chemical knowledge and skill have been extensively and usefully applied in devising formulæ for the preparation of very many medicines of this class, and in consequence they have been subjected to alteration and improvement in every new edition of the Pharmacopœia. The one which now engages our attention has, however, been passed by neglected, as being either so unimportant as not to merit attention, or already so perfect as not to need it. But practical daily acquaintance with it has convinced us that it is high time attention was paid to it. In order that we may more fully comprehend the nature of those changes in this preparation, which form the subject of the present paper, let us look at the composition of its parts. And first of ipecacuanha root.

The following is Pelletier's analysis of the cortical, which is the most active portion of the root:—

Emetina	16 parts
Volatile Oil	2 "
Wax	6 "
Gum	10 "
Starch	42 "
Woody Fibre	20 "
Loss	4 "

100

More recently, Willigk has discovered in ipecacuanha an acid, which he calls Ipecacuanhic Acid. It very much resembles gallic acid in its characters, so much so, as to have been mistaken by Pelletier for that acid. It is probably combined in the root with the emetina, which is the active principle, forming with it a salt, soluble to some extent in water, but more so in alcohol. It is this compound of ipecacuanhate of emetina to which ipecacuanha wine owes its medicinal activity, and which we are therefore interested in preserving from alteration or loss. The remaining constituents of the root need not occupy our attention, as they probably play no part in the change to which this preparation is subject.

Secondly, what is the composition of sherry wine?

It is pretty much the same as of all other grape wines, and in general it may be said to consist of bouquet or odorous principle, grape sugar, bitartrate of potash, tartaric, citric, malic, acetic, and carbonic acids, earthy salts, gum, alcohol, and water. All of these constituents are liable to variation as to quantity in different samples, according to the climate, species of vine, place of growth, and difference of manipulation in the various processes of manufacture. The most important points of difference, however, are the proportions of sugar, alcohol, vegetable acids, and acidulous salts which the wines contain, and these will therefore engage our attention in considering the subject we have in hand.

Sherry is not the only kind of wine on which I have experimented, but in order more fully to illustrate the subject, I have prepared a series of samples of ipecacuanha wine, with eight different wines derived from five different countries, viz., Spain, Sicily, Cape of Good Hope, France, and Germany, and the kinds of wine I have selected are Victoria Sherry, an excellent standard type of this kind of wine, Marsala, Cape Sherry, Cape Madeira, Chablis, Barsac, Hocheimer, and Niersteiner. (I may add they were all purchased from the European and Colonial Wine Company.) In addition to the samples prepared with the pure wines, are two other series made with the same wines, but one series containing in addition 10 per cent. of spirit of wine, 56 over proof, added during the maceration, and the other containing 10 per cent. of spirit added after the filtration of the product. All the samples have been prepared six months, and were sealed as soon as they could be bottled (twenty or thirty specimens were here exhibited to the meeting). These were only parts of what I prepared, the remainders being in every case reserved for examination after being allowed to stand and deposit for four or five months.

This brings us to the first question stated in the list of subjects suggested for investigation by the Conference—What is the nature of the deposit in ipecacuanha wine? We are all familiar with the appearance of the deposit in our retail and dispensing bottles, and familiar too with the fact, that however bright the wine may be when the bottles are filled, it always has to be filtered once or twice before they are empty. The deposit is readily separable by filtration. Under the microscope it is seen to consist in every case of two distinctly different substances mixed together, in proportions varying according to the nature of the wine which has been used. One of these is a yellowish, transparent, granular mass, totally destitute of any trace of crystallization, and presenting an appearance very like that of minute starch-granules; of this I shall speak again. The other is in large white well-formed prismatic crystals, evidently bitartrate of potash derived from wine. In most of the samples the bitartrate was estimated to amount to as much as 50 per cent. of the whole deposit; in others, to not more than 20 per cent. The relative proportions of the two constituents of the deposit were not, in any case, determined by weighing, on account of the small quantity procurable.

On submitting it to chemical examination, the observed reactions proved that the deposit in every case, from whatever sample of wine the preparation had been made, was

* Read before the British Pharmaceutical Conference.

October 14, 1868.]

litatively identical. It was found to be insoluble or nearly with the exception of course of the bitartrate of potash. Alcohol partially dissolved it, and the portion insoluble in menstruum, dissolved entirely in dilute hydrochloric acid. To obtain it in the form of solution for examination, it was mixed with alcohol mixed with a few drops of strong hydrochloric acid. This dissolved all but the bitartrate of potash, and the solution gave the following reactions:—Being carefully neutralized with ammonia, tincture of galls produced in the unmistakable grey-brown precipitate, tannate of emetine.

A solution of iodine produced a yellow precipitate, hydriodate of emetina. Excess of ammonia gave the ruddy-brown coloration characteristic of ipecacuanhic acid, when combined with alkalies. Tincture of sesquichloride of iron produced an olive-green coloration, and sometimes a precipitate of the same colour, ipecacuanhate of iron. Answering in a uniformly similar manner to these tests in every case, the deposit is found to consist of the only important ingredient in the ipecacuanha root or wine viz. ipecacuanhate of emetina, but mixed in varying proportions with bitartrate of potash. It may be asked here—as the deposit is so uniformly identical in every sample prepared with whatever kind of wine, some influence, acting with equal uniformity, must be the cause of the deposit; what is that influence? The answer in my opinion is, oxygen acting upon and absorbed by the ipecacuanhic acid. Having arrived at this opinion only near the close of my investigation, I regret that I have not been able to determine the point by actual experiment, but in support of my opinion I adduce the account of the chemical characteristics of ipecacuanhic acid, observed by its discoverer, Berzelius, and given in the *Pharmaceutical Journal*, 1st series, N. S., page 608.

“A solution of a persalt of iron is coloured green by even a very diluted solution of the pure acid; ammonia produces a violet colour; by an excess of ammonia the liquid becomes black like ink, and a blackish-brown sediment is formed in it.”

If a solution of the pure acid mixed with alkalies be exposed to the atmosphere, a darkish-brown coloration with absorption of oxygen is very soon perceptible. This tendency to absorb oxygen, although in a slighter degree, belongs to the pure acid as well as to its salts.”

If, as is thus stated, ipecacuanhic acid absorbs oxygen when combined with ammonia, becomes insoluble, and carries down the ammonia with it, there seems fair reason for the presumption that it would do so when combined with a far weaker base, viz. emetina. This *a priori* reasoning is borne out by the investigation which I have described, and I therefore conclude that the deposit in ipecacuanha wine, in addition to the bitartrate of potash, is emetina combined with ipecacuanhic acid, which has been to some extent altered by absorption of oxygen.

With regard to the second question, viz., “How is the deposit affected by the nature of the wine used?” I reply, only as regards its amount and the proportion in it of bitartrate of potash. As I before stated, the samples were prepared with eight different kinds of wine, and there is a palpable difference between them in the amount of deposit they contain, which fact is accounted for by another, viz., that there is as great a difference between them in the proportion of their principal constituents, viz., sugar, alcohol, and vegetable acids. I have quantitatively examined all these samples of wines, with a view to ascertain the percentage in them of the two last substances; this is the result:—

Name of Wine.	Quantity of free vegetable acid in 1 pint, and its percentage.		Quantity of alcohol in Oi, and its percentage.		Amount of deposit, No. 1, containing most.
	Grains in Oi.	Percentage.	Sp. grav. '825		
Marsala	44	502	f3ij 3vij or	19 40	1
Cape Madeira ..	47.2	540	f3iv 3ss or	20.3	2
Cape Sherry ..	33.040	377	f3iv 3j mxxvj or	20.79	3
Victoria Sherry ..	33.040	377	f3iv 3j mxi or	22.0	4
Barsac	not determined.		f3j 3vij or	9.45	5
Niersteiner ..	59.760	671	f3iiss or	7.5	6
Hochheimer ..	66.0	754	f3j 3j mxi or	6.0	7
Chablis	53.660	613	f3ij 3v or	13.12	8

It will be observed on inspecting the samples, that the largest amount of deposit is contained in those samples prepared with the wines of Sicily, Spain, and the Cape of Good Hope; while in the samples prepared with the wines of

France and Germany, the deposit is conspicuously smaller. On referring to the table of percentages of alcohol and acids or acidulous salts for a clue to the cause of this notable difference, we are struck by the fact that the former contain a large proportion of alcohol, but are deficient in vegetable acids, while in the latter the acids predominate and the proportion of alcohol is comparatively small. But as these latter wines containing much acid and little alcohol are those in which there is least deposit, it follows, as a practical conclusion, that such wines are much better adapted for the preparation of the ipecacuanha wine, than the sherry ordered in the *Pharmacopœia*, or the substitutes which are commonly employed for the purpose, however great their alcoholic strength.

But not only does the nature of the wine affect the quantity of the deposit, it also determines the proportions of its component parts. If wine were a mere mixture of spirit and water, even then there would be a deposit from a tincture of ipecacuanha made with it, arising from the absorption of oxygen before mentioned. I have prepared such a sample of the same proportions of root and solvent as the official wine, but containing 54 per cent. of alcohol, sp. gr. .825; in other words, proof spirit. It will be seen by this sample, that the mere increase of the proportion of alcohol up to this point, at any rate, does not suffice to prevent the deposit, which in this case is simply ipecacuanhate of emetina.

But wine contains also bitartrate of potash in solution, and this is found to be deposited with the ipecacuanhate of emetina. In most wines a portion of the grape sugar contained in the grape juice is left unfermented, that it may communicate an agreeable sweetness to the beverage. Although, for this purpose, the fermentation is nominally stopped when the wine is finished and bottled, this process goes on steadily and continuously, though it may be slowly, as long as any sugar remains unconsumed. The quantity of alcohol in the wine thus gradually increases, and the bitartrate of potash being insoluble in alcohol is gradually deposited; and I venture to assert, that by the loss of this ingredient the wine is to the same extent rendered incapable of retaining in solution the active principle of ipecacuanha it previously may have contained. I have shown before that alcohol, though existing in large proportion in any given tincture of ipecacuanha, is not of itself able to prevent the deposit of emetina, etc.; and I now beg your attention to another tincture of ipecacuanha, prepared with a mixture of rectified spirit and water, containing only 20 per cent. of the former, but containing also four grains of tartaric acid to the fluid ounce, as another evidence of the power of acids even in a wine or tincture of little alcoholic strength, to retain the active principle in solution for a long, if not an unlimited period. You will see by inspecting the sample that it contains, if any, a very small amount of deposit compared with the tincture containing only spirit and water.

As there may have been in the minds of many pharmacutists doubts concerning the nature of the deposit in ipecacuanha wine, I trust my experiments may conduce in some measure to produce clearer views on the subject; and as we know the preparation in question to be an unsatisfactory one, that they may tend to its improvement.

EXTRACTS FROM THE MINUTES OF EVIDENCE

TAKEN BEFORE THE SELECT COMMITTEE ON CHEMISTS AND DRUGGISTS' BILLS.*

THE DIFFERENCE BETWEEN CHEMISTS AND DRUGGISTS AND PHARMACEUTICAL CHEMISTS.

The following extract from the minutes of the evidence given by Mr. Mackay, honorary secretary of the Pharmaceutical Society in Edinburgh, will be read with interest by our subscribers.

Mr. Ayrton: Did the original charter define what a pharmaceutical chemist was, or are we to understand that a pharmaceutical chemist is a person who sells drugs for the purpose of their being used internally or externally for the cure of human disorders?—That is the meaning of the term; he is supposed to be a man with a certain amount of education, prepared to compound medicines generally, and prescriptions with accuracy.

Continued from page 125.

Do I understand the object is to compound them for the purpose of treating human disorders? I want to know what it is, for I have not the least idea at present.—If you were ill and attended by a medical man, and that medical man came and wrote a prescription, and wished that prescription compounded, it might go to a pharmaceutical chemist, and that pharmaceutical chemist would be expected in *propriâ personâ*, or by a qualified assistant, to compound with accuracy and care that prescription.

Is he a person who compounds drugs under a prescription to be made under the direction of a registered medical man?—And generally that other matters, such as tinctures, pills, ointments, and powders, should be made up with correctness.

Is he a person who is engaged in compounding or making up something or other to be used only under the prescriptions of medical men?—A pharmaceutical chemist is quite distinct from the professed analytical chemist. He not only compounds prescriptions, but vends medicines for family and domestic use. Having passed an examination, he is supposed to be acquainted with chemistry, and thus to prevent incompatibles from being mixed, so as to prove useless, and even sometimes dangerous.

I understand a chemist is a person who either sells drugs or chemical substances, in a simple or compound form. I want to know what a pharmaceutical chemist is; what is the essential property of a pharmaceutical chemist; is he a person who sells certain substances for the purpose of curing human disorders, internally or externally?—To sell certain substances that may be used for that purpose, and other purposes too.

What are the other purposes?—Most chemists, if you were to send to them, would sell you mustard, black pepper, arrowroot, and other substances used in families.

Is he a pharmaceutical chemist?—Most chemists sell these and a variety of other things.

What is the peculiarity of a pharmaceutical chemist; is it confined to persons who sell substances for the purpose of curing human disorders?—Not entirely.

Will you give me all the other purposes for which he is to sell other substances to make him a pharmaceutical chemist, as compared with a chemist and druggist who is not pharmaceutical?—The sole difference consists, in a certain measure of education. The chemist and druggist, as at present, may be equal to a pharmaceutical chemist, with this difference, that a pharmaceutical chemist has either read up or attended lectures, and can better undergo an examination than the man without the same knowledge who opens a shop and compounds prescriptions. One is recognised by law as a man qualified to carry on the purposes of his profession, which I hold to be chiefly and primarily prescriptions; but as this alone would not serve in this country, at present prices, to keep alive pharmaceutical chemists they add various other things.

Are we to understand that a pharmaceutical chemist is a person who compounds and mixes drugs, and also has a knowledge of the use of those drugs, and other purposes?—Certainly.

What is the extent of the knowledge and use he is to have?—He is expected to recognise various drugs, and to say whether they are good or bad. He is then asked their properties and doses. Take scammony as an instance. Opium may be cited as another example, and he is expected not only to give the dose of this article, but also the various Pharmacopœia preparations into which it enters, whether these may be tinctures, powder, or pills. Chemistry generally is a science with which he must show an intimate acquaintance.

You have at present no definite view of the pharmaceutical chemist other than a person who goes through a certain examination which has been prescribed by somebody or other?—That is the position of the pharmaceutical chemist.

And that knowledge, to a rather large extent, is the knowledge of the apothecary and surgeon?—We have no apothecaries and few surgeons connected with the dispensing of drugs in Scotland. When any one speaks of an apothecary in Scotland, what is intended is a pharmaceutical chemist, or a chemist and druggist. No such person exists in Scotland as an apothecary, in the sense understood in England and Ireland.

Do you know surgeons in Scotland make up their own

medicines?—Very few. That system is rapidly dying out; and, as evidence of it, I may mention that within the last few years chemists and druggists have sprung up in small towns where formerly such a thing was never thought of. I may mention the small town of Dunblane as an instance; while there is a chemist in East Linton, in neither of which places are there many inhabitants.

Sir John Shelley: Has he been examined?—No, he is a chemist and druggist. Both are well capable of supplying the wants of the places, and would come at once on the register now proposed. Again, at another small place (Tranent) a chemist has sprung up, and is doing well. He also is one who would give ample evidence of being fit for registration.

What objection is there to a medical man, such as you have south, say in Sussex, in an out-of-the-way place, resident there, making up medicines from his own prescriptions; what objection is there to it?—Not the least objection so far as we are concerned, but a great objection by medical men, for this reason. In a country district the medical man has frequently long rides to take, probably including an area of fifty or sixty miles; and when he comes home weary and tired, he is neither fit nor inclined to set to work with pestle and mortar to make up pills or compound medicines. He would rather be supplied, if possible, by some one in the village.

Mr. Ayrton: How many persons in Scotland are carrying on the business of compounding and selling drugs who are not members of the Pharmaceutical Society?—I should think probably throughout Scotland 400 or 500.

What proportion do they bear to the number who are members of the Pharmaceutical Society?—In Scotland I do not think there are more than 120 or 130 connected with the Pharmaceutical Society.

And the others would be 500?—Roughly, between 400 and 500.

And how many of the 400 or 500 would require the thorough knowledge you have spoken of for the duties of a pharmaceutical chemist?—Do you refer to the major examination?

What you are speaking of?—If you asked the minor examination, I could answer more readily. I should think half would be prepared to undergo the major examination. As I stated in my former examination, it is not the fear of examination, but the high rates. A man in the country cannot easily take away ten or fifteen guineas from his business.

The minor has not the effect in your mind of making a man a pharmaceutical chemist?—Certainly not. It would give him, however, an amount of education and information sufficient to enable him to compound prescriptions.

DR. MILLER ON THE PROGRESS OF CHEMISTRY.*

It would lead us too much into detail, were I to attempt to show how this idea of the atomicity of the elements has been applied, and is still in process of application, to the study of the formation of compounds in general; how it endeavours to explain the existence of a limit to their number; and how it even teaches us to anticipate their possible varieties.

In these and kindred investigations, the necessity for the introduction of fixed principles of nomenclature for regulating the construction of names for the recently-discovered compounds, has been sensibly felt; and indeed the changes in notation rendered necessary by the alteration in the values assigned to the atomic weights of many of the chemical elements, have rendered a general revision of the system of chemical nomenclature a matter of pressing importance. Probably few subjects could more usefully occupy a portion of the time of this Section during the ensuing week, than a thoughtful consideration of the changes which it may be expedient to introduce. The meeting of chemists from various parts of Europe, with many from distant parts of our own country, affords an excellent opportunity for discussing a subject of this kind, where any conclusions, to be practically effective, must secure the concurrence of a majority of the active cultivators of the science.

Passing allusion only can now be made to some of the processes of mineral and metallurgic chemistry; such as the

* Continued from page 142.

improvements in the details of the process for preparing magnesium, the comparative facility with which the recently discovered metals, thallium, rubidium, and cesium, and their compounds may be obtained, and the application of Edtenbacher of his observation of the sparing solubility of their alums to the extraction of the new alkalies from the lithium residues of commerce. Of indium, too, the latest of the newly discovered metals revealed by the spectrum, it must suffice to say that it has been obtained in quantity which places its existence as a distinct metal beyond question. I am indebted to my friend Professor Roscoe for the small specimens of the metal and its sulphide now upon the table. Among the subjects connected with its development, is one bearing upon *isomerism*, or the remarkable fact of the existence in many cases of two or more bodies of different properties, but yet composed of the same elements, combined in identically the same proportions. Upon this subject, which, at our last meeting, was characterised by Dr. Erdling, as the chemical problem of the day, a suggestive theoretical paper was published, about twelve months ago, by Dr. Crum Brown; whilst, in the same direction, Cahours, Kekulé, Beilstein, Fittig, and several other chemists have published valuable experimental researches. Inquiries of this kind are now acquiring special importance from the numerous cases of the formation of such isomeric bodies by the methods of synthesis and substitution, which are daily multiplying.

Closely connected with the same subject, are the investigations into the constitution of the more complex organic acids, which have been prosecuted so actively during the last five or six years, and which, in the hands of Kolbe, Frankland, Perkin, and Duppa, Kekulé, Wurtz, and their pupils, have made such rapid progress.

During the past year Frankland and Duppa have especially signalled themselves by their researches upon the lactic and the acrylic series. Two years ago, Frankland, commencing with oxalic ether, and acting upon it with zinc ethyl, obtained from it leucic ether, by substituting ethyl for a portion of the oxygen contained in the oxalic ether; and afterwards, conjointly with his friend Duppa, he has generalised this reaction. Still more recently, these chemists have traced the connection between the lactic and the acrylic or oleic series, by reactions in which the abstraction of the elements of an atom of water from the basylous portion of a member of the lactic group converts it into the corresponding member of the acrylic series.

An extensive branch of industry is now springing up in the improved methods of voltaic deposition of the metals. Weil has, by the use of an alkaline solution of tartrate of copper, contrived to coat iron and steel with a tough closely adherent sheathing of copper, by simply suspending the articles to be coated by means of a wire of zinc in the metallic bath. No battery is required. Lead and tin may in a similar manner be deposited on copper, iron, or steel, if the oxide of tin or of lead be dissolved in a bath of strong solution of caustic soda.

I must, before I conclude, advert to one or two interesting additions to our knowledge upon the side where chemistry and physics meet. Few results, perhaps, were more unexpected than those obtained by Deville and Troost upon the permeability to gases of certain dense metals at elevated temperatures. They have proved that platinum and iron, when white-hot, become for the time porous, and are rapidly permeated by hydrogen, which will even pass out under the pressure of the atmosphere, and leave a vacuum almost perfect within the tube. In one form of these experiments, tubes of hammered and of cast platinum (which in one case was as much as the twelfth of an inch in thickness) were fitted by means of corks into the axis of a shorter and wider tube of glazed porcelain; a slow current of pure and dry hydrogen was then maintained through the porcelain tube, whilst a current of dry air was transmitted through the platinum tube. At ordinary temperatures no change was observed in either gas. A fire was then lighted around the outside of the porcelain tube, and gradually raised until the heat became very intense. At 2,000 degrees Fahr. the oxygen contained in the air had entirely disappeared; nothing but nitrogen mixed with steam passed out of the platinum tube, hydrogen had passed through the pores of the platinum, and entered into combination with the oxygen of the air within; whilst at still higher temperatures the moist nitrogen became

mixed with hydrogen. As the tube cooled the same phenomena occurred in the inverse order, till, when the ordinary temperature had been regained, no diffusion of hydrogen was perceptible, and unaltered air was collected from the platinum tube. Analogous results were obtained when a tube of soft cast steel was substituted for that of platinum, though the thickness of the steel tube was an eighth, or in some cases as much as a sixth of an inch.

From these experiments one practical conclusion deducible is, that air-pyrometers, the bulbs of which are formed of iron or platinum, cannot be relied on when employed for measuring elevated temperatures; glazed porcelain, however, was found to confine the gases completely.

Curious as these results are, they are but parenthetical in another series of more general bearing, in which Deville has for some time been engaged, viz., the phenomena of *dissociation*, as he has termed the partial decomposition which compound gases experience under the influence of a temperature more or less elevated.

A very striking result was obtained by the use of an apparatus similar to that employed in the experiments just described, but in which a brass or silver tube was substituted for the platinum or iron tube. A rapid flow of water was maintained through the metallic tube, so that it was kept quite cool, whilst the outer porcelain tube was gradually raised to an intense heat as before. On transmitting a current of pure and dry carbonic oxide through the porcelain tube, the lower part of the surface of the cold metallic tube became covered with deposited carbon, whilst a portion of the carbonic oxide by combining with the oxygen previously united with this carbon, became converted into carbonic anhydride.

Sulphurous anhydride was by similar treatment resolved into sulphur and sulphuric anhydride; and even hydrochloric acid was partially separated into hydrogen and chlorine. These experiments are intimately connected with the attempts made to explain the cause of certain exceptions to Ampère's law, that *equal volumes of gases or vapours contain the same number of molecules of each*. Chemists now generally assume that the molecule, both of simple and of compound bodies, forms two volumes of vapour, and consequently that the molecular weight of any substance corresponds with the number which represents twice its density when referred to the density of hydrogen, if this be taken as unity. But there are exceptions to this law; pentachloride of phosphorus, hydrochlorate of ammonia, hydriodate of phosphuretted hydrogen, and various other bodies, instead of forming two volumes when one molecule of each is converted into vapour, yield four volumes.

In order to explain these anomalies, Kopp and Cannizzaro suppose that, at the temperature at which the vapour-densities of these compounds are observed, the bodies are temporarily decomposed, and, instead of forming one homogeneous vapour, are at the time of the observation really composed of a mixture of vapours. In certain cases this explanation is probably the true one; but its general acceptance has been disputed by Deville himself, though his results on dissociation seem to cursory observation, to be in its favour; and it must be admitted that, up to the present time, the arguments and experiments which he has brought forward in opposition to the views of Kopp and Cannizzaro have not been satisfactorily answered.

No sufficient proof, for example, has yet been adduced that the well-known anomalous cases of nitric oxide, chlorous anhydride, hydrosulphide of ammonium, cyanide of ammonium, and various other salts of ammonium and the volatile bases are due to dissociation of their components.

This subject is one, however, too intimately connected with the molecular theories at present under discussion, to remain long in its actual state. New experiments and evidence will no doubt be forthcoming, which will throw further light upon the cause of these outstanding exceptions.

NEW TREBLE-CUT LINT.—The Ellesmere Steam Lint Company are now manufacturing, under a patent, a flax lint which seems to us to be superior to any lint hitherto produced. The fabric is very strong though it can be readily torn into pieces of any size or shape, and the pile is beautifully fine and soft. We have submitted samples of the "treble-cut lint," calendered and uncalendered, to several medical friends, who pronounce them to be of unequalled quality. For general use, they recommend the uncalendered lint.



TRADE LEGISLATION.

TO THE EDITOR OF THE CHEMIST AND DRUGGIST.

SIR,—Societies, like individuals of the present day, require relaxation and rest after the arduous duties of a busy season. Few will deny that the United Society had a right to claim that privilege. During the vacation it has found its labours of the past session appreciated by country members; and it returns invigorated to renew the work of incorporating the trade upon the one great principle of self government. It must be gratifying to every chemist who contrasts the position and estimation in which this Society is held now with that which it occupied twelve months ago. The disparaging tone then adopted can no longer be applied either towards its members or its objects. The remarks with which we were familiar arose from want of knowledge and an unadvised contempt for its strength and determination. The United Society combated on fair and honourable grounds (after every attempt to conciliate and work with the Pharmaceutical Society had failed) the pretensions of that Institution to establish a monopoly. The Bill of the United Society was preferred to that of the Pharmaceutical by the Home Secretary because it was a free trade measure, and provided against the indiscriminate sale of poisons; and the Select Committee of the House of Commons have recommended its provisions to Government as the basis on which a new Act should be founded.

Even the Conservative members of the Pharmaceutical Council are now doubtful whether Government will allow them to place any restriction upon the chemist's trade; and it remains to be seen whether the result of the past session has induced them to surrender those pretensions which prevented joint action of the two Societies, and whether the flattery of some supporters and the due justice rendered by opponents to their merits and usefulness has softened their defeat or tended only to swell their former arrogance.

It is much to be desired that the past antagonism should be obliterated, and that both Societies, having learned to respect each other, should unite to accomplish a fixed object.

It is useless to keep on the mask when the face is known. Numbers of men who loudly proclaim their Pharmaceutical degree are unworthy of it, as an educational standard; and many who have it not would honour the title by holding it. There are, doubtless, numbers in business grossly ignorant of their trade who can scarcely claim to be chemists and druggists. This is to be deplored. But it is not for these we agitate—we take them as a necessity, and we close the doors—but for the hundreds of men whose pride and self-respect will never allow them to submit to an examination by others no hotter than themselves. It is for those whose ability and position will always make them independent of any society—men who trust in themselves, and gain the confidence of the public by their talents, perseverance, and self-respect.

It is for these we contest the right of the Pharmaceutical Society to deprive them of their moral and legitimate standing, because they have not and will not subscribe towards the support of the Institution in Bloomsbury. It is well known and admitted that the excuse of sufficient attainment being wanting amongst outsiders, which prevents them being received as members, is twaddle, and that the real barrier is their never having subscribed a shilling towards the establishment. Whatever the intention of the dominant power, the spirit manifested by a large number of Pharmaceutists is satisfactory. Mr. Reynolds, in his letter, published in the September number of the *Pharmaceutical Journal*, points to some important truths which the Council would do well to study. The general expression conveys hope that an end will be put to divisional quarrels. More especially was this conciliatory spirit displayed by all parties at the recent meeting at Birmingham: there a general desire was acknowledged that before another session of Parliament a good understanding would be arrived at, and that, instead of going to the Legislature as antagonists, we should be allied. The success attending the efforts of the United Society enables the Executive Committee to forget any unfriendly feeling or ill-natured remarks called forth during the heat of contest; and they are now prepared to support any measure which gives the right of nomination and election as the basis of a new Act. They are satisfied that the Pharmaceutists' wishes cannot be realised; but they would gladly work with them for the good of the trade. Should the same spirit which guided the Pharmaceutical Council during the last Council prevail, they must expect the whole power of the United Society, with its increased development, to be put forth against them in support of their own principles.

I am, Sir, yours obediently,

JOHN WADE.

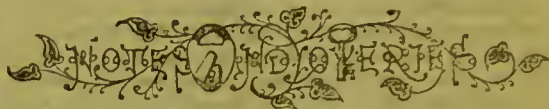
100, York-street, Westminster, October 10, 1865.

TO THE EDITOR OF THE CHEMIST AND DRUGGIST.

SIR,—Deep regret is frequently expressed that, whilst the CHEMIST AND DRUGGIST Journal, under the able conduct of its present talented Editor, rapidly advances in its intellectual and scientific character, it should manifest such a disregard for the interests of that cause, its early professions of attachment to which were largely contributive to an extended circulation. The absence of letters from correspondents may arise from circumstances over which an Editor can have no control. The pressure of mercantile claims arising out of new undertakings, and a thousand other demands upon the time of previous contributors, may create a dearth of original articles on our trade politics, for which an Editor is by no means responsible. But when there is in editorial notes a manifest wish to disclaim all connexion with the United Society, and in the editorial articles the development of a strong "Pharmaceutical" predilection, it becomes a subject for serious consideration whether such a journal is or is not worthy of support. Many of the subscribers have been long looking, but hitherto looking in vain, for the promised impartial editorial review of the correspondence on our trade politics between Mr. Procter, on the part of the Pharmaceutical Society, and Messrs. Wade and D'Aubney, on the part of the United Society. No doubt the Editorial promise has prevented other, perhaps less able writers, from essaying the

task. It is, doubtless, to a highly cultivated mind far more agreeable to write purely scientific articles than to discuss the party politics of two sections of the trade. But the great desideratum at this crisis of affairs is a medium through which the members of the trade can be informed of all that is transpiring which affects their interest, and may be directed in that course which is most likely to result in the security of their rights and privileges. It is possible that present lukewarmness may not only deprive us of the advantages already gained, but lead to a bondage worse than any which has previously threatened us. This is no time for apathy. The existence, the importance, the respectability, and the claims of the United Society have been recognised by the House of Commons; but we must reiterate our appeals until we secure that just and equitable legislation which we have a right to demand. Our Executive Committee will, I doubt not, watch over our interests with untiring vigilance; and the members in the province must be prepared to sustain them in the efforts by cheerfully contributing the sinews of war.

Oct. 6, 1865.

I remain, yours truly,
"PHILALETHES."

GENERAL NOTE.—Illness has prevented Mr. H. N. Draper completing his Report on the Dublin Exhibition in the present number. Our promised article on the results of the Birmingham Conference will appear in our next.

"CHLORODYNE."

Queenstown, Oct. 6, 1865.

SIR,—Allow me, through your columns, to submit to your readers the following formula for "chlorodyne," which will remain perfectly mixed for any length of time, and is perfectly soluble in water, with similar therapeutic effect. Hoping the subject will be further discussed, I am, &c., CHAS. W. B. SHAW, M.A.P.A. R Ext. cannab. Ind. gr. viij.; morphie acetatis, gr. iv.; olei capsici; olei menth. pip.; acid. hydrocyan. sing. ʒj.; etheris chloric sol., ʒvj.; theriacæ, ʒiss.; aceti, ʒss. Solve resinam oleaque in etheri; et acetatum in aceto; misce solutionem morphie cum theriacam et adde solutionem etherealem atque deinde acidum. Serve in phiala clausa in loco frigido.

NERVINE BALSAM.

"Tyro" (Egremont).—Expressed oil of mace and ox-marrow, of each, ʒiv.; melt by a gentle heat, and add oil of rosemary, ʒij.; oil of cloves, ʒj.; camphor, ʒj.; balsam of tolu, ʒij. (the last two dissolved in) rectified spirit, ʒiv.

H. F. (Alnwick).—We have never met with the preparation, and have searched in vain for a formula.



In Chemicals a large business was done up to the end of last month at a general advance in prices, but the rise of 3 per cent. in ten days in the rate of discount by the Bank of England has since quieted the speculative buyers, and only moderate business has since been done for actual orders. Tartaric Acid was last sold at 1s. 5½d. to 1s. 6d. Citric sells steadily at 2s. to 2s. 1d. Oxalic has been advanced to 11d. to 12d., and is firm at this rise. Sal Acetos has been advanced to 14d., and is scarce. Chlorate is steady at 14d. Bichromate remains quiet at 6d. Iodine sells slowly at 6d. to 6½d., according to quality. Prussiate of Potass has sold more freely at the advanced rates of 11½d. to 11¾d. A good business has been done in Quinine at 5s. to 5s. 1d. for French, and 5s. 3d. to 5s. 4d. for English. Soda Crystals are firm at 120s. Ash scarce; 2½d. to 2¾d. per degree. Caustic Soda more in demand at 18s. 6d. to 21s. Bicarbonate of Soda scarce at 16s. Cream Tartar is more in demand, for American sales last made at 100s. to 102s. 6d. Large sales of Bleaching Powder for export at 13s. Brimstone steady at £7; flour quiet at 12s., and roll at 10s. to 10s. 6d. Sal Ammoniac is steady at 35s. 6d. to 37s. 6d. Alum sells steadily at £7 in tierces, and £7 5s. in barrels. Sulphate of Ammonia is in better demand at 18s. to 14s. Refined Saltpetre is steady at

3s. to 29s.; Rough is 6d. dearer, and sells more readily. Linseed oil is quieter, and the price closed at 36s. 9d. to 37s. on the spot, and 36s. up to December. Turpentine is quiet at 45s. Petroleum is in good request at 3s. 2d. to 3s. 3d., and searce. A cargo of 3000 barrels sent from the Continent, price kept secret. Rosin is rather better. Ashes are without change.

The public sales of Drugs have been rather small, but a tolerably good business has been done for home use, and many parcels have been taken for export to America. China Sals went dearer, but at late sales declined to 67s. 6d. to 68s. Turkey were bought in at £3 10s. China Camphor has been in good demand at 92s. 6d. to 97s. 6d., and some large parcels of Japan on the spot, and to arrive, sold at 100s. Shellac advanced 30s. to 40s., but has again become dull. A large business has been done in Oil Anniseed at 7s. 8d. to 8s. 10d. spot, and 7s. 10d. to 8s. for arrival. A few lots of Cassia sold at 7s. 9d. Castor Oil is rather dearer, some good sale seconds sold at 5½d. to 6½d. Galangal Root has sold at 3s. 6d. to 14s. Citronelle Oil is ¼d. dearer, last sales made at 4½d. Jalap is rather dearer. Aloes are rather dearer. Musk has brought rather higher prices. Cardamoms are steady. Cod-Liver Oil is rather cheaper. Croton Seeds are much dearer, £26 5s. being paid for a small lot. Star Anniseeds are also dearer, £10 15s. being last paid. Some bales of good bright Capiivi sold at 1s. 8½d. Gums are without change. Sales of Cubebs made at 82s. 6d. Rhatania Root rather lower, common sold at 4½d. to 5d. China Rhubarb is much dearer, and searce. China Soy is dearer, 3s. 9d. to 4s. Sarsaparilla without change. Gambia is dearer, and more in request. In other goods no change.

PRICE CURRENT.

These quotations are the latest for ACTUAL SALES in Mining and the like. It will be necessary for our retail subscribers to bear in mind that they cannot, as a rule, purchase at the prices quoted, inasmuch as these are the CASH PRICES IN BULK. They will, however, be able to form a tolerably correct idea of what they ought to pay.

	1865. s. d.	1865. s. d.	1864. s. d.	1864. s. d.
RGOL, Cape, per cwt.....	75 0 ..	91 6 ..	32 6 ..	100 0 ..
French	58 0 ..	83 0 ..	60 0 ..	35 0 ..
Oporto, red	45 0 ..	47 0 ..	46 0 ..	48 0 ..
Sicily	72 6 ..	75 0 ..	72 6 ..	75 0 ..
Naples, white	68 0 ..	76 0 ..	65 0 ..	78 0 ..
Florence, white.....	85 0 ..	90 0 ..	85 0 ..	90 0 ..
red.....	80 0 ..	85 0 ..	80 0 ..	85 0 ..
Bologna, white.....	90 0 ..	95 0 ..	92 6 ..	97 0 ..
ROWROOT. (duty 4½ per cwt.)				
Bermuda.....per lb.....	1 1 ..	1 6 ..	1 6 ..	0 0 ..
St. Vincent.....	0 2½ ..	0 6½ ..	0 4½ ..	0 7½ ..
Jamaica.....	0 3 ..	0 5½ ..	0 3½ ..	0 7 ..
Other West India.....	0 2 ..	0 3 ..	0 3½ ..	0 4½ ..
Brazil.....	0 2 ..	0 3½ ..	0 2½ ..	0 3 ..
East India.....	0 2 ..	0 3½ ..	0 3½ ..	0 6 ..
Natal.....	0 4½ ..	0 8½ ..	0 5½ ..	0 8½ ..
Sierra Leone.....	0 3½ ..	0 4½ ..	0 4½ ..	0 5½ ..
SHES.....per cwt.				
Pot, Canada, 1st sort	29 6 ..	0 0 ..	31 0 ..	31 6 ..
Pearl, ditto, 1st sort	30 6 ..	0 0 ..	34 0 ..	35 0 ..
RIMSTONE,				
rough.....per ton.....	135 0 ..	140 0 ..	140 0 ..	150 0 ..
roll	195 0 ..	205 0 ..	195 0 ..	210 0 ..
flour	215 0 ..	250 0 ..	240 0 ..	250 0 ..
CHEMICALS,				
Acid—Acetic, per lb.	0 4 ..	0 0 ..	0 4 ..	1 0 ..
Citric	2 0 ..	2 1 ..	1 7 ..	1 7½ ..
Nitric	0 5 ..	0 5½ ..	0 5 ..	0 5½ ..
Oxalic	0 11 ..	1 0 ..	0 9½ ..	0 0 ..
Sulphuric	0 0½ ..	0 0 ..	0 0½ ..	0 0 ..
Tartaric crystal.....	1 5½ ..	1 6 ..	1 5½ ..	0 0 ..
powdered	1 6½ ..	0 0 ..	1 6 ..	1 0½ ..
Alum	140 0 ..	145 0 ..	120 0 ..	125 0 ..
powder.....	160 0 ..	0 0 ..	140 0 ..	145 0 ..
Ammonia, Carbonate, per lb.	0 5 ..	0 5½ ..	0 5½ ..	0 6 ..
Sulphate	260 0 ..	0 0 ..	260 0 ..	200 0 ..
Antimony, ore	160 0 ..	180 0 ..	160 0 ..	180 0 ..
crude	24 0 ..	25 0 ..	26 0 ..	0 0 ..
regulus.....	34 0 ..	0 0 ..	36 0 ..	37 0 ..
French star	34 0 ..	0 0 ..	36 0 ..	37 0 ..
Arsenic, lump	15 0 ..	15 6 ..	15 0 ..	15 6 ..
powder	6 0 ..	6 3 ..	6 6 ..	7 6 ..
Bleaching powder.....	12 6 ..	13 6 ..	11 6 ..	12 0 ..
Borax, East India refined..	0 0 ..	0 0 ..	0 0 ..	0 0 ..
British	54 0 ..	0 0 ..	56 0 ..	0 0 ..
Calomel	2 8 ..	0 0 ..	2 9 ..	0 0 ..
Camphor, refined	1 4½ ..	0 0 ..	1 3 ..	1 4 ..
Copperas, green	50 0 ..	52 6 ..	52 6 ..	55 0 ..
Corrosive Sublimate, per lb.	2 3 ..	0 0 ..	2 4 ..	0 0 ..
Green Emerald	0 0 ..	0 0 ..	0 0 ..	0 0 ..
Brunswick.....per cwt.....	0 0 ..	0 0 ..	0 0 ..	0 0 ..

	1865. s. d.	1865. s. d.	1864. s. d.	1864. s. d.
CHEMICALS.				
Iodine, dry	0 6 ..	0 6½ ..	0 5½ ..	0 5½ ..
Magnesia, Carbon	42 6 ..	45 0 ..	42 6 ..	45 0 ..
Calcined	1 6 ..	1 8 ..	1 6 ..	1 8 ..
Minium, red	21 6 ..	24 6 ..	21 6 ..	24 6 ..
orange	32 6 ..	33 0 ..	32 6 ..	33 0 ..
Potash, Bichromate	0 6 ..	0 0 ..	0 6½ ..	0 0 ..
Chlorate	1 2 ..	0 0 ..	1 0 ..	0 0 ..
Hydriodate.....per oz.....	0 6½ ..	0 6½ ..	0 6 ..	0 6½ ..
Prussiate.....per lb.....	0 11½ ..	0 11½ ..	0 11½ ..	0 11½ ..
red	1 9 ..	1 9½ ..	1 10 ..	1 11 ..
Precipitate, red	2 9 ..	0 0 ..	2 11 ..	0 0 ..
white	2 0 ..	0 0 ..	2 11 ..	0 0 ..
Prussian Blue	1 0 ..	1 10 ..	1 0 ..	1 10 ..
Rose Pink	29 0 ..	0 0 ..	29 0 ..	0 0 ..
Sal-Acetos	1 0½ ..	1 1 ..	1 0 ..	0 0 ..
Sal-Ammoniac				
British	35 6 ..	38 0 ..	35 6 ..	37 6 ..
Salts, Epsom	8 6 ..	0 0 ..	8 0 ..	8 6 ..
Glauber.....	5 0 ..	5 6 ..	5 0 ..	5 6 ..
Soda, Ash.....per deg.....	0 2½ ..	0 2½ ..	0 2 ..	0 0 ..
Bicarbonate.....per cwt.....	15 6 ..	16 6 ..	11 9 ..	12 0 ..
Crystals	120 0 ..	0 0 ..	0 0 ..	97 6 ..
Sugar Lead, white	36 0 ..	37 0 ..	37 0 ..	38 0 ..
brown	26 0 ..	26 6 ..	28 0 ..	28 6 ..
Sulphate Quinine.....per oz.....				
British, in bottle ..	5 3 ..	5 4 ..	6 3 ..	0 0 ..
Foreign	5 0 ..	5 1 ..	5 7 ..	5 8 ..
Sulphate Zinc.....per cwt.....	14 6 ..	15 0 ..	14 6 ..	15 0 ..
Verdigris.....per lb.....	0 11 ..	1 0 ..	0 11 ..	1 0 ..
Vermilion, English	2 11 ..	3 3 ..	3 0 ..	3 4 ..
China	2 10 ..	3 0 ..	3 2 ..	3 3 ..
Vitriol, blue or Rom. per ct.	27 0 ..	28 0 ..	29 0 ..	31 0 ..
COCHINEAL, per lb.				
Honduras, black	3 2 ..	5 0 ..	3 0 ..	4 4 ..
silver	2 6 ..	3 6 ..	2 6 ..	3 4 ..
Mexican, black	3 2 ..	3 7 ..	3 0 ..	3 3 ..
silver	3 0 ..	3 2 ..	2 8 ..	2 10 ..
Lima	3 0 ..	3 2 ..	0 0 ..	0 0 ..
Teneriffe, black.....	3 5 ..	3 11 ..	3 0 ..	3 10 ..
silver	3 4 ..	3 6 ..	2 11 ..	3 1 ..
DRUGS,				
Aloes, Hepatic	100 0 ..	170 0 ..	100 0 ..	170 0 ..
Socotrine	140 0 ..	290 0 ..	170 0 ..	300 0 ..
Cape, good	42 0 ..	45 0 ..	45 0 ..	47 0 ..
inferior.....	28 0 ..	41 0 ..	30 0 ..	44 0 ..
Barbadoes	70 0 ..	280 0 ..	50 0 ..	320 0 ..
Ambergis, grey	21 0 ..	25 0 ..	16 0 ..	13 0 ..
Anglicia Root	20 0 ..	35 0 ..	20 0 ..	35 0 ..
Aniseed, China star.....	160 0 ..	165 0 ..	105 0 ..	110 0 ..
German, &c.	24 6 ..	40 0 ..	24 0 ..	89 0 ..
Balsam, Canada	0 10 ..	0 11 ..	0 10 ..	0 11 ..
Capiivi	1 7 ..	1 8 ..	1 9 ..	1 10 ..
Peru	4 8 ..	4 9 ..	4 9 ..	4 11 ..
Tolu	2 6 ..	2 9 ..	3 9 ..	0 0 ..
Bark, Cascarilla.....per cwt.....	23 6 ..	34 0 ..	25 0 ..	36 0 ..
Pern, crown & grey per lb.	0 9 ..	2 0 ..	0 9 ..	2 3 ..
Calisaya, flat	2 3 ..	2 9 ..	3 0 ..	3 6 ..
quill.....	2 0 ..	2 6 ..	2 9 ..	3 3 ..
Carthagena.....	0 10 ..	1 9 ..	1 0 ..	1 10 ..
Pitayo	0 10 ..	2 2 ..	1 7 ..	2 4 ..
Red	1 9 ..	10 0 ..	2 6 ..	9 0 ..
Bay Berries.....per cwt.....	0 0 ..	0 0 ..	0 0 ..	0 0 ..
Bucca Leaves.....per lb.....	0 3 ..	0 8 ..	0 3 ..	0 11 ..
Camomile Flowers	15 0 ..	65 0 ..	25 0 ..	105 0 ..
Camphor, China	95 0 ..	100 0 ..	85 0 ..	90 0 ..
Canella alba	23 0 ..	33 0 ..	23 0 ..	35 0 ..
Cantharides	2 2 ..	2 3 ..	2 7 ..	2 8 ..
Cardamoms, Malabar, good ..	6 3 ..	6 6 ..	5 6 ..	6 3 ..
inferior	4 6 ..	6 0 ..	4 6 ..	5 6 ..
Madras	2 9 ..	5 3 ..	2 3 ..	4 0 ..
Ceylon	3 3 ..	4 0 ..	5 0 ..	5 5 ..
Cassia Fistula.....per cwt.....	16 0 ..	32 0 ..	14 0 ..	22 0 ..
Castor Oil, 1st pale	0 6½ ..	0 7½ ..	0 6 ..	0 7½ ..
2nd	0 5½ ..	0 6 ..	0 4½ ..	0 5½ ..
inferior and dark ..	0 4½ ..	0 5 ..	0 4½ ..	0 5 ..
Bombay, in casks ..	0 4½ ..	0 4½ ..	0 4½ ..	0 4½ ..
Castoreum	1 0 ..	20 0 ..	1 0 ..	20 0 ..
China Root	27 0 ..	28 0 ..	16 0 ..	23 0 ..
Cocculus Indicus	25 0 ..	29 0 ..	20 0 ..	24 0 ..
Cod Liver Oil	3 6 ..	6 6 ..	6 0 ..	16 6 ..
Colocynth, apple	0 7 ..	1 0 ..	0 6½ ..	0 11 ..
Colombo Root	240 0 ..	280 0 ..	120 0 ..	160 0 ..
Cream Tartar				
French.....	100 0 ..	0 0 ..	97 6 ..	100 0 ..
Venetian	102 6 ..	0 0 ..	105 0 ..	107 6 ..
grey	90 0 ..	92 6 ..	95 0 ..	100 0 ..
brown	85 0 ..	90 0 ..	85 0 ..	92 6 ..
Croton Seed	360 0 ..	400 0 ..	70 0 ..	80 0 ..
Cubebs	80 0 ..	85 0 ..	97 6 ..	100 0 ..
Cumin Seed	10 0 ..	23 0 ..	27 0 ..	34 0 ..
Dragon's blood reed.....	200 0 ..	340 0 ..	200 0 ..	300 0 ..
lump	85 0 ..	280 0 ..	90 0 ..	260 0 ..
Galangal Root	13 0 ..	15 0 ..	16 0 ..	18 0 ..
Gentian Root	21 0 ..	22 0 ..	23 0 ..	0 0 ..
Guinea Grains	56 0 ..	60 0 ..	55 0 ..	57 0 ..
Honey, Narbonne	40 0 ..	80 0 ..	40 0 ..	80 0 ..
Cuba	25 0 ..	33 0 ..	26 0 ..	38 0 ..
Jamaica	28 0 ..	58 0 ..	27 0 ..	63 0 ..
Ipecacuanha	7 8 ..	7 9 ..	7 0 ..	7 3 ..
Isinglass, Brazil	2 0 ..	5 2 ..	1 10 ..	4 6 ..
East India	1 0 ..	4 4 ..	0 6 ..	4 3 ..
West India	3 4 ..	3 7 ..	3 2 ..	3 4 ..
Russian	9 6 ..	10 9 ..	9 6 ..	11 0 ..
Jalap.....	1 9 ..	5 3 ..	0 9 ..	5 4 ..

DRUGS—continued.					OILS—continued.				
	1865.	1865.	1864.	1864.		1865.	1865.	1864.	1864.
	s. d.	s. d.	s. d.	s. d.		s. d.	s. d.	s. d.	s. d.
Juniper Berries . . . per cwt.	7 0	9 0	6 0	9 0	Madras per cwt.	44 6	46 0	37 0	38 0
Gorman and French . .	9 0	10 0	8 0	10 0	Palm, fine	42 0	42 6	35 0	36 0
Italian	0 0½	0 0½	0 0½	0 0½	Linseed	37 0	37 6	34 0	0 0
Lemon Juice per deg.	0 0½	0 0½	0 0½	0 0½	Rapeseed, English, pale . .	48 6	0 0	44 0	44 6
Liquorice per cwt.	75 0	80 0	80 0	83 0	brown	47 6	0 0	41 0	0 0
Spanish	55 0	75 0	55 0	70 0	Foreign pale	49 0	0 0	45 0	0 0
Italian	2 0	2 6	2 7	2 0	brown	47 6	0 0	41 6	42 0
Manna, flaky	1 2	1 4	1 4	0 0	Lard	77 0	0 0	46 6	47 0
small	1 2	1 4	1 4	0 0	Tallow	40 0	0 0	41 0	41 6
Musk per oz.	17 0	34 6	18 0	30 3	Rock Crude per ton	29 0	£21 0	£17 0	0 0
Nux Vomica	12 6	15 0	11 0	13 0	Oils, Essential—				
Opium, Turkey	14 0	15 0	16 0	17 6	Almond, essential . . . per lb.	0 0	0 0	0 0	0 0
Egyptian	0 0	0 0	0 0	0 0	expressed	0 10½	0 0	0 0	0 0
Orris Root per cwt.	29 0	31 0	30 0	33 0	Aniseed	7 8	0 0	6 2	6 3
Pink Root per lb.	3 0	0 0	2 6	2 9	Bay per cwt.	0 0	0 0	110 0	120 0
Quassia (bitter wood) per ton	120 0	0 0	85 0	90 0	Bergamot per lb.	10 0	15 0	7 0	10 0
Rhatany Root per lb.	0 5	1 4	0 9	1 6	Cajuputa, (in bond) . . per oz.	0 2	0 2½	0 2½	0 2½
Rhubarb, China, round . .	3 6	12 6	2 9	6 0	Caraway per lb.	5 0	6 6	5 0	6 6
flat	4 0	9 6	3 6	6 3	Cassia	7 9	0 0	8 3	0 0
Dutch, trimmed . . .	14 0	15 0	0 0	0 0	Cinnamon (in bond) . . per oz.	1 2	3 3	0 2	3 0
Russian	16 0	17 0	12 6	13 0	Cinnamon Leaf	0 5	0 8	0 2	0 4½
Saffron, Spanish	29 0	32 0	28 0	33 0	Citronel	0 4½	0 4½	0 5½	0 6½
Salap per cwt.	140 0	160 0	140 0	145 0	Clove	0 0	0 0	0 2	0 4
Sarsaparilla, Lima	1 0	1 4	1 0	1 5	Croton	1 0	1 8	0 9	1 0
Para	0 11	1 1	0 11	1 2	Juniper per lb.	2 9	2 6	1 10	3 0
Honduras	0 9	1 7	0 11	1 6	Lavender	1 9	2 10	2 6	4 6
Jamaica	1 1	2 3	1 6	2 3	Lemon	6 3	9 0	5 6	7 0
Sassafras per cwt.	10 0	12 0	14 0	15 0	Lemongrass per oz.	1 3	1 6	0 10½	0 11
Seammony, virgin . . . per lb.	30 0	44 0	32 0	33 0	Mace, ex.	0 1	0 2½	0 2	0 3½
second	14 0	23 0	12 0	23 0	Neroli	5 0	5 9	5 0	7 0
Seneka Root	2 10	3 0	3 0	3 3	Nutmeg	0 1½	0 3½	0 1	0 2½
Senna, Calcutta	0 0	0 0	0 0	0 0	Orange per lb.	5 0	6 0	5 6	6 9
Bombay	0 4	0 5½	0 3½	0 5	Otto of Roses per oz.	18 0	22 0	16 0	24 0
Tinnevely	0 4	1 3	0 4	1 6	Peppermint, per lb.				
Alexandria	0 3	0 9	0 3½	0 8	American	14 0	14 6	12 0	13 0
Snake Root	3 6	0 0	4 6	4 9	English	0 0	0 0	34 0	36 0
Spermaceti, refined . . .	0 1½	0 0	0 11	0 0	Rhodius per oz.	0 0	0 0	0 0	0 0
Squills	0 1½	0 3½	0 0½	0 2½	Rosemary per lb.	2 0	2 3	0 0	0 0
Tamarinds, E. India, per cwt.	15 0	17 0	15 0	17 0	Sassafras	3 3	3 6	3 9	4 0
West India	10 0	20 0	12 0	23 0	Spearmin	5 0	8 0	5 0	8 0
Terra Japonica—					Spike	0 0	0 0	0 0	0 0
Gambier per cwt.	20 6	28 0	21 6	30 6	Thyme	1 9	2 0	0 0	0 0
Cutch	22 6	26 0	22 0	23 0	PITCH, British per cwt.	12 0	0 0	12 0	0 0
Valerian Root, English . .	20 0	29 0	20 0	30 0	Swedish	0 0	0 0	0 0	0 0
Vanilla, Mexican per b.	20 0	35 0	26 0	33 0	SALT PETRE, per cwt.				
Wormseed per cwt.	10 0	0 0	11 0	12 0	English, 6 per cent. or under	23 6	24 0	29 0	30 0
GUM—Ammoniac, drop, per cwt.	105 0	170 0	95 0	120 0	over 6 per cent. . . .	23 0	23 6	28 0	28 6
lump	35 0	85 0	30 0	85 0	Madras	20 6	22 0	27 6	28 6
Animi, fine pale	200 0	230 0	200 0	210 0	Bombay	20 0	22 0	27 0	28 0
bold amber	190 0	220 0	190 0	210 0	British-refined	28 0	29 0	34 6	35 0
medium	160 0	180 0	160 0	180 0	Nitrate of soda	13 6	14 0	15 6	16 6
small and dark	100 0	150 0	100 0	155 0	SEED, Canary per qr.	40 0	48 0	0 0	0 0
ordinary dark	40 0	95 0	40 0	95 0	Caraway, English . . . per cwt.	0 0	0 0	0 0	0 0
Arabic, E. I., fine pale picked	76 0	85 0	85 0	95 0	German, &c.	0 0	0 0	0 0	0 0
unsorted, good to fine	62 0	75 0	64 0	76 0	Coriander	0 0	0 0	48 0	54 0
red and mixed	46 0	60 0	50 0	60 0	East India	0 0	0 0	0 0	0 0
siftings	25 0	40 0	25 0	40 0	Hemp	44 0	46 0	0 0	0 0
Turkey, picked, good to fine	130 0	180 0	120 0	160 0	Linseed, Black Sea	56 0	62 0	60 0	61 0
second and inferior . .	65 0	120 0	65 0	110 0	Calcutta	57 0	61 0	55 0	57 0
in sorts	32 0	50 0	32 0	50 0	Bombay	61 0	63 0	64 0	65 0
Gedda	40 0	48 0	40 0	43 0	Egyptian	54 0	0 0	60 0	0 0
Barbary, white	58 0	75 0	74 0	78 0	Mustard, brown . . . per bshl.	6 0	18 0	10 0	12 0
brown	45 0	53 0	44 0	46 0	white	9 0	10 0	9 0	12 6
Australian	30 0	37 0	37 0	45 0	Poppy, East India . . . per qr.	53 0	54 6	51 0	52 0
Assafetida, fair to good . .	20 0	55 0	33 0	75 0	Rape, English	0 0	0 0	0 0	0 0
Benjamin, 1st quality . . .	340 0	900 0	350 0	850 0	Danube	61 0	65 0	0 0	0 0
2nd	210 0	300 0	280 0	300 0	Calcutta fine	61 0	62 0	56 0	57 0
3rd	50 0	240 0	50 0	240 0	Bombay	72 0	74 0	61 0	62 0
Copal, Angola, red	70 0	82 6	72 0	80 0	Teel, Sesmy or Gungy	60 0	64 0	54 0	57 0
pale	70 0	80 0	75 0	85 0	Cotton per ton	159 0	155 0	130 0	140 0
Benguela	60 0	95 0	60 0	90 0	Ground Nut Kernels . . per ton	270 0	0 0	280 0	0 0
Sierra Leone . . . per lb.	0 4	1 0	0 4	1 0	SOAP, London yel. . . per cwt.	28 0	32 0	20 0	34 0
Manilla per cwt.	23 0	36 0	25 0	55 0	mottled	32 0	36 0	34 0	36 0
Dammar, pale	40 0	52 6	34 0	47 6	curd	46 0	50 0	46 0	50 0
Gaiabanum	160 0	170 0	100 0	120 0	Castile	40 0	42 0	40 0	41 0
Gamboge, picked, pipe . . .	250 0	300 0	150 0	190 0	Marseilles	40 0	42 0	40 0	42 0
in sorts	140 0	240 0	80 0	140 0	Soy, China per gal.	3 3	3 6	2 10	3 0
Guaicum per lb.	0 9	1 5	0 6	1 0	Japan	1 6	0 0	1 5	0 0
Kino per cwt.	340 0	460 0	320 0	500 0	Sponge, Turkey, fine picked	14 0	18 0	19 0	23 0
Kowrie	27 0	65 0	20 0	50 0	fair to good	6 0	12 0	7 0	17 0
Mastic, picked per lb.	8 6	0 0	4 6	5 0	ordinary	1 6	4 0	2 6	6 0
Myrrh, gd. and fine, per cwt.	130 0	160 0	140 0	180 0	Bahama	0 8	2 6	0 4	1 3
sorts	70 0	110 0	70 0	130 0	TURPENTINE, Rough, per ct.	0 0	0 0	0 0	0 0
Olibanum, pale drop	68 6	78 0	73 0	76 0	Spirits, French	45 0	46 0	63 0	63 0
amber and yellow . . .	55 0	67 0	58 0	68 0	American, in casks . .	0 0	0 0	0 0	0 0
mixed and dark	20 0	43 0	18 0	40 0	WAX, Bees, English	180 0	185 0	170 0	175 6
Senegal	70 0	80 0	95 0	102 0	German	190 0	200 0	162 6	185 0
Sandrac	72 6	95 0	75 0	95 0	American	185 0	0 0	175 0	0 0
Tragacanth, leaf	180 0	260 0	180 0	260 0	whitc fine	0 0	0 0	0 0	0 0
in sorts	100 0	130 0	100 0	130 0	Jamaica	180 0	190 0	185 0	192 6
OILS per tun	£ s. d.	£ s. d.	£ s. d.	£ s. d.	Gambia	190 0	195 0	175 0	185 0
Seal	40 0	46 0	42 0	49 0	Mogadore	130 0	170 0	130 0	167 6
Sperm, body	115 0	0 0	64 0	66 0	East India	150 0	190 0	150 0	180 0
Cod	49 0	50 0	51 0	52 0	ditto, bleached	200 0	220 0	200 0	240 0
Whale, Greenland	0 0	0 0	0 0	0 0	vegetable, Japan	56 0	63 0	56 0	66 0
South Sea, pale	41 0	46 0	42 0	48 0	WOOD, Dye, per ton				
East India Fish	34 0	35 0	35 0	0 0	Fastic, Cuba	160 0	180 0	170 0	180 0
Olive, Galioli per ton	54 0	55 0	59 0	60 0	Jamaica	105 0	110 0	140 0	145 0
s. d.	s. d.	s. d.	s. d.	s. d.	Savanna	120 0	0 0	0 0	0 0
Florence, half-chest . . .	20 0	0 0	20 0	21 0	Zante	0 0	0 0	0 0	0 0
Cocoonut, Cochlin . . . per cwt.	50 0	51 0	38 6	39 0	Logwood, Campeachy . . .	180 0	190 0	190 0	210 0
Ceylon	47 6	48 0	36 6	37 6	Honduras	105 0	0 0	100 0	105 0
Sydney	40 0	47 0	32 0	37 0	St. Domingo	85 0	90 0	87 6	0 0
Ground Nut and Gin					Jamaica	85 0	87 6	82 0	85 0
Bombay	44 0	45 0	38 0	30 0					



